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**PRELIMINARY ASSESSMENT/
VISUAL SITE INSPECTION**

**GENERAL ELECTRIC COMPANY
ELECTRICAL DISTRIBUTION AND
CONTROL DIVISION
BLOOMINGTON, ILLINOIS
ILD 005 453 691**

FINAL REPORT

Prepared for

**U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Waste Programs Enforcement
Washington, DC 20460**

Work Assignment No.	:	C05087
EPA Region	:	5
Site No.	:	ILD 005 453 691
Date Prepared	:	October 16, 1992
Contract No.	:	68-W9-0006
PRC No.	:	009-C05087-IL2V
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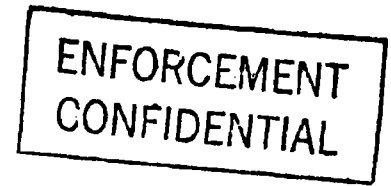
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EXECUTIVE SUMMARY

Resource Applications, Inc. (RAI) performed a preliminary assessment and visual site inspection (PA/VSI) to identify and assess the existence and likelihood of releases from solid waste management units (SWMU) and other areas of concern (AOC) at the General Electric Company-Electrical Distribution and Control Division (GE) facility in Bloomington, Illinois. This summary highlights the results of the PA/VSI and the potential for releases of hazardous wastes or hazardous constituents from SWMUs and AOCs identified. In addition, a completed U.S. Environmental Protection Agency (EPA) Preliminary Assessment Form (EPA Form 2070-12) is included in Attachment A to assist in prioritization of RCRA facilities for corrective action.

The GE facility manufactures electric motor control equipment such as starters, reversers, relays, push buttons, switches, and sensors. The facility generates and manages the following waste streams: waste paint (F003/F005), paint sludge (D001), spent wastewater treatment sludge (F006), spent 1,1,1-trichloroethane (TCA) (F001/F002), nonhazardous waste oil and coolant, nonhazardous polyester paint waste, and nonhazardous grinding sludge. The facility has operated at its current location since 1955. The facility occupies 65 acres in a commercial area and employs about 350 people. The facility's regulatory status is that of a large-quantity generator. Before GE occupied the site, the land was used for agricultural purposes. The facility is currently closing two storage areas that managed hazardous waste for greater than 90 days. The units are inactive and no longer store any type of waste. A revised closure plan was approved by the Illinois Environmental Protection Agency (IEPA) in a letter dated June 12, 1991. Two other storage units are active and manage hazardous waste for less than 90 days.

The PA/VSI identified the following eight SWMUs and one AOC at the facility:

Solid Waste Management Units

1. Hazardous Waste Storage Area No. 1
2. Nonhazardous Waste Storage Areas
3. Wastewater Treatment Unit
4. Hazardous Waste Satellite Accumulation Areas
5. Former Hazardous Waste Storage Area No. 1
6. Former Hazardous Waste Storage Area No. 2
7. Former Incinerator

8. Hazardous Waste Storage Area No. 2

Area of Concern

1. Trichloroethene Spill Area

The GE facility occupies 65 acres in a commercial area in Bloomington, Illinois. Bloomington has a population of about 45,000.

The GE facility is bordered on the north by commercial property and GE park, on the west by commercial property, on the south by commercial property, and on the east by vacant land. The nearest school, Stevenson School, is located about 0.5 mile south of the facility. Facility access is controlled by a north gate with a security guard present 24 hours a day, 7 days a week. There is also a south gate that is kept locked. The entire site is secured by a 7-foot chain-link fence with barbed wire on top.

The nearest surface water body, Sugar Creek, is located 0.2 mile north of the facility and is used for recreational purposes. Other surface water bodies in the area include Lake Bloomington which is located 6 miles north of the GE facility.

Surface water from Lake Bloomington is used as the drinking water supply. There are no drinking water wells or industrial wells located within 3 miles of the facility.

Sensitive environments are not located on site. There are no wetland areas or sensitive environments located within 3 miles of the facility.

The potential for release to ground water and surface water is low. Hazardous waste is stored indoors in closed 55-gallon containers on 8-inch thick concrete, except for SWMU 8. The hazardous waste at SWMU 8 is stored outdoors in a closed roll-off box on 8-inch thick concrete. The water table in the vicinity of the facility is at a depth of approximately 180 feet below ground surface. Soil borings performed on the east side of the facility encountered clay soils containing minimum ground water to the drilled depth of 31 feet. The facility is outside the 500-year flood plain, with the closest surface water body, Sugar Creek, located 0.2 miles north of the facility.

The potential for release to air is low. Hazardous wastes are stored in closed 55-gallon containers and 20-cubic-yard roll-off boxes.

There was a release of trichloroethene (TCE) to on-site soils on January 24, 1991. An aboveground TCE product storage tank located outdoors on the east side of the facility was damaged. One hundred gallons of TCE spilled onto concrete and soil (AOC 1). Approximately 50 cubic yards of soil have been removed. Soil sampling in October 1991 revealed that TCE contamination was still present. The soil sampling also revealed lead and cadmium were present in the area of the Former Incinerator (SWMU 7). Cadmium contamination was detected by the Former Hazardous Waste Storage Area No. 1 (SWMU 5). TCE contamination was detected in the area of the Former Hazardous Waste Storage Area No. 2 (SWMU 6).

RAI recommends that the facility continue remediation of the TCE contaminated soil of AOC 1 and SWMU 6. RAI also recommends remediating the soil in the areas of cadmium and lead contamination at SWMUs 5 and 7. RAI recommends no further action for SWMUs 1, 2, 3, 4, and 8.

1.0 INTRODUCTION

PRC Environmental Management, Inc. (PRC) received Work Assignment No. C05087 from the U.S. Environmental Protection Agency (EPA) under Contract No. 68-W9-0006 (TES 9) to conduct preliminary assessments (PA) and visual site inspections (VSI) of hazardous waste treatment and storage facilities in Region 5. Resource Applications, Inc. (RAI), TES 9 team member, provided the necessary assistance to complete the PA/VSI activities for the General Electric Company-Electrical Distribution and Control Division (GE).

As part of the EPA Region 5 Environmental Priorities Initiative, the RCRA and CERCLA programs are working together to identify and address RCRA facilities that have a high priority for corrective action using applicable RCRA and CERCLA authorities. The PA/VSI is the first step in the process of prioritizing facilities for corrective action. Through the PA/VSI process, enough information is obtained to characterize a facility's actual or potential releases to the environment from solid waste management units (SWMU) and areas of concern (AOC).

A SWMU is defined as any discernible unit at a RCRA facility in which solid wastes have been placed and from which hazardous constituents might migrate, regardless of whether the unit was intended to manage solid or hazardous waste.

The SWMU definition includes the following:

- RCRA-regulated units, such as container storage areas, tanks, surface impoundments, waste piles, land treatment units, landfills, incinerators, and underground injection wells
- Closed and abandoned units
- Recycling units, wastewater treatment units, and other units that EPA has generally exempted from standards applicable to hazardous waste management units
- Areas contaminated by routine and systematic releases of wastes or hazardous constituents. Such areas might include a wood preservative drippage area, a loading-unloading area, or an area where solvent used to wash large parts has continually dripped onto soils.

An AOC is defined as any area where a release to the environment of hazardous waste or constituents has occurred or is suspected to have occurred on a nonroutine and nonsystematic basis. This includes any area where such a release in the future is judged to be a strong possibility.

The purpose of the PA is as follows:

- Identify SWMUs and AOCs at the facility.
- Obtain information on the operational history of the facility.
- Obtain information on releases from any units at the facility.
- Identify data gaps and other informational needs to be filled during the VSI.

The PA generally includes review of all relevant documents and files located at state offices and at the EPA Region 5 office in Chicago.

The purpose of the VSI is as follows:

- Identify SWMUs and AOCs not discovered during the PA.
- Identify releases not discovered during the PA.
- Provide a specific description of the environmental setting.
- Provide information on release pathways and the potential for releases to each medium.
- Confirm information obtained during the PA regarding operations, SWMUs, AOCs, and releases.

The VSI includes interviewing appropriate facility staff, inspecting the entire facility to identify all SWMUs and AOCs, photographing all SWMUs, identifying evidence of releases, initially identifying potential sampling locations, and obtaining all information necessary to complete the PA/VSI report.

This report documents the results of a PA/VSI of the GE facility in Bloomington, Illinois. The PA was completed on January 22, 1992. RAI gathered and reviewed information from the Illinois

Environmental Protection Agency (IEPA) and from EPA Region 5 RCRA files. RAI also reviewed relevant publications from the U.S. Department of Agriculture (USDA), U.S. Geological Survey (USGS), U.S. Department of Commerce (USDC), and the Federal Emergency Management Agency (FEMA). The VSI was conducted on January 24, 1992. It included interviews with facility representatives and a walk-through inspection of the facility. Eight SWMUs and one AOC were identified at the facility.

RAI completed EPA Form 2070-12 using information gathered during the PA/VSI. This form is included in Attachment A. The VSI is summarized and 12 inspection photographs are included in Attachment B. Field notes from the VSI are included in Attachment C. Attachment D is soil sampling results for SWMUs 5, 6, and 7.

2.0 FACILITY DESCRIPTION

This section describes the facility's location, past and present operations (including waste management practices), waste generating processes, history of documented releases, regulatory history, environmental setting, and receptors.

2.1 FACILITY LOCATION

The GE facility is located at 1601 G.E. Road in Bloomington, McLean County, Illinois (latitude 40°30'00" N and longitude 88°57'00" W), as shown in Figure 1. The facility occupies 65 acres in a commercial area.

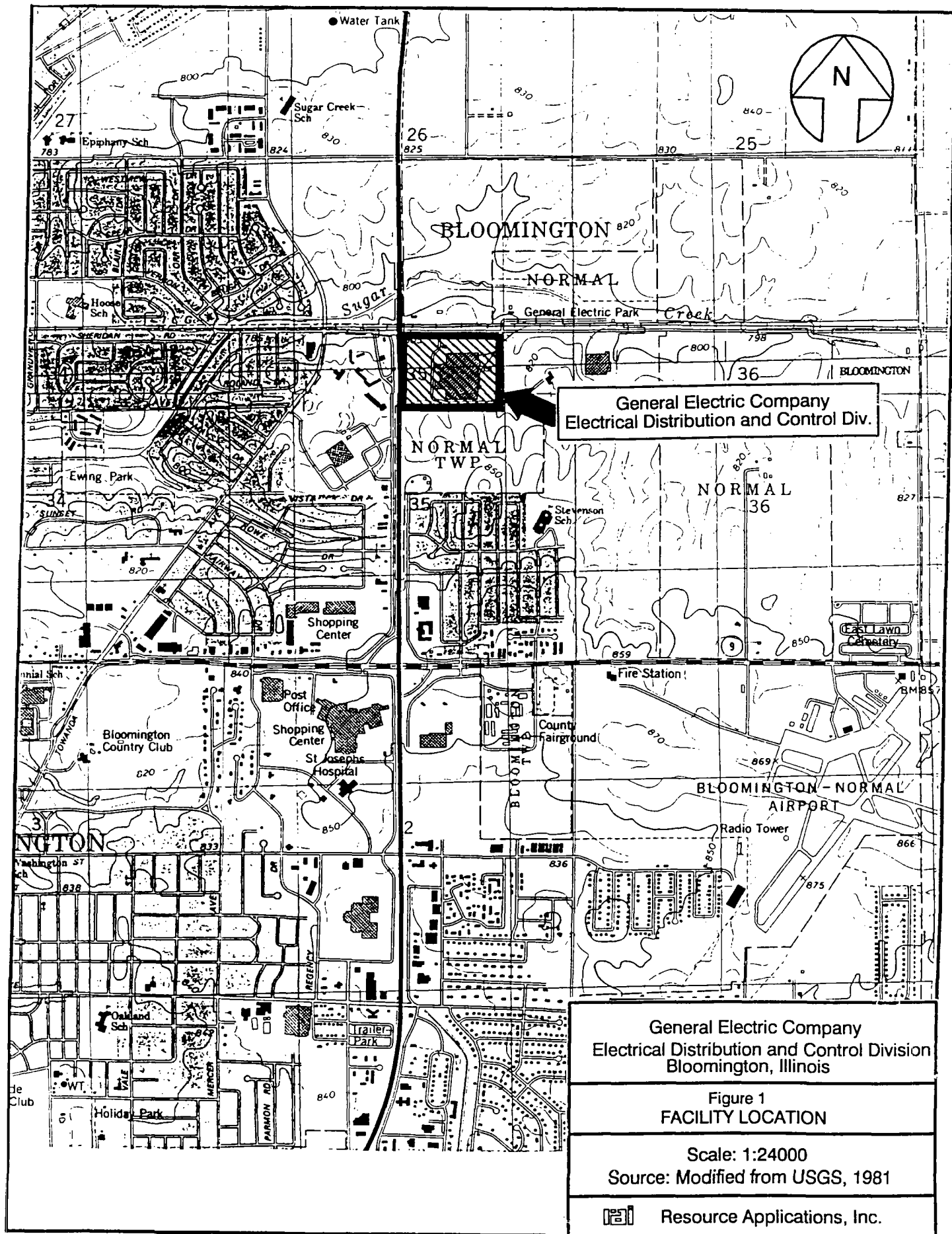
The GE facility is bordered on the north by commercial property and GE park, on the west by commercial property, on the south by commercial property, and on the east by vacant land.

2.2 FACILITY OPERATIONS

The GE facility manufactures electric motor control equipment such as starters, reversers, relays, push buttons, switches, and sensors. The primary processes are the plating, molding, painting, and assembly of parts. The manufactured electric motor control equipment is also packed and stored at the facility.

GE receives most of its parts from other GE plants. This facility does some manufacturing of molded plastic parts and punched steel parts. The metal parts that need to be cleaned and plated are moved to the east end of the facility. Cleaning operations consist of vapor degreasers and in February 1992 GE plans to have an aqueous washer installed to replace the vapor degreasers. After machining parts are washed with phosphoric acid soap. Before heat treatment in the painting operation some parts are washed with a sodium carbonate solution.

Plating operations consist of gold, nickel, tin, and zinc plating for assorted metals. GE operates seven plating lines, that are located in two rooms on the east side of the facility near



receiving. The gold plating line is located in a small room. The other six lines are located in a larger plating room. After caustic and acid cleaning and plating, the parts are moved to assembly.

The parts that need to be painted are taken to the painting area. Small parts are powder painted with epoxy or polyester paint. After the parts are painted, they are dried in the baking oven. About 80 percent of the parts are painted by another process, electrophoretic coating. This process also requires subsequent oven drying after the parts are painted. The parts are moved through the painting process by conveyor hooks. When the painting process is finished, the parts are then assembled and packaged.

Wastewater generated from the plating and painting processes is treated in the Wastewater Treatment Unit (SWMU 3). Treatment of the wastewaters at the wastewater treatment unit includes cyanide destruction, chrome reduction, pH adjustment, clarifiers, filter presses, and other related equipment. Hazardous waste is stored in the Hazardous Waste Storage Area No. 1 (SWMU 1) on the east side of the building. In February 1992, GE plans to begin operation of an aqueous washer to replace the vapor degreasers. Facility SWMUs are identified in Table 1. The facility layout, including SWMUs and AOCs, is shown in Figure 2.

The facility has operated at its current location since 1955 and employs about 350 people. The facility consists of one main building, which is 360,000 square feet, and two parking lots that are located on the north side of the building. Since operations began, GE has owned and operated the facility. Before 1955, the site was used for agricultural purposes.

2.3 WASTE GENERATING PROCESSES

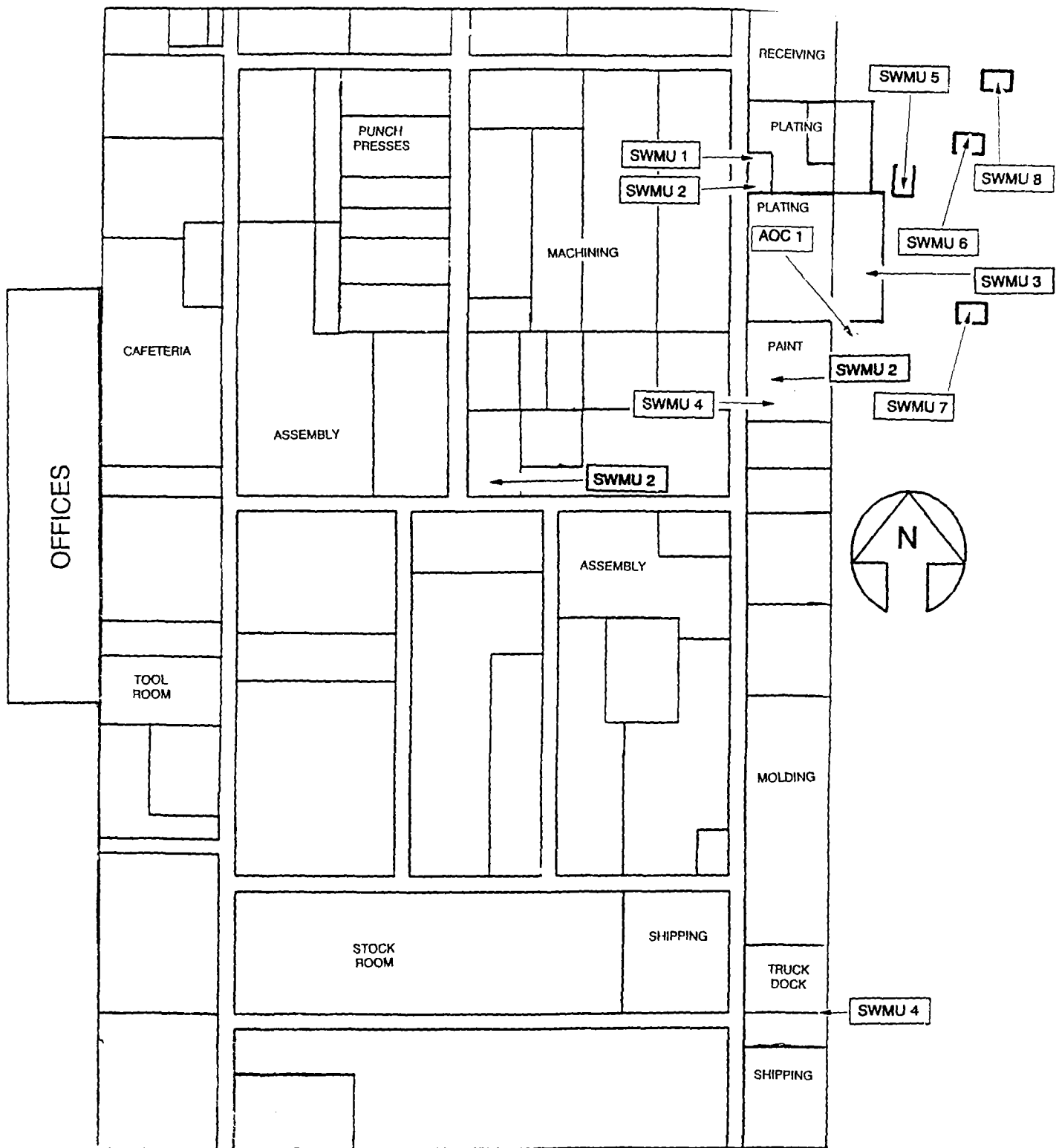
The primary waste streams generated at the GE facility are waste paint (F003/F005), paint sludge (D001), spent TCA (F001/F002), wastewater treatment sludge (F006), nonhazardous waste oil and coolant, and special waste polyester paint and grinding sludge. These wastes are generated during the production of electric control equipment. Wastes generated at the facility are discussed below and are summarized in Table 2. Monthly and annual generation rates presented are based on 1991 waste generation data.

TABLE 1
SOLID WASTE MANAGEMENT UNITS (SWMU)

SWMU Number	SWMU Name	RCRA Hazardous Waste Management Unit*	Status
1	Hazardous Waste Storage Area No. 1	No	Active, less than 90-day storage
2	Nonhazardous Waste Storage Areas	No	Active
3	Wastewater Treatment Unit	No	Active
4	Hazardous Waste Satellite Accumulation Areas	No	Active
5	Former Hazardous Waste Storage Area No. 1	Yes	Inactive, formerly used for greater than 90-day storage; currently undergoing RCRA closure
6	Former Hazardous Waste Storage Area No. 2	No	Inactive, formerly used for greater than 90-day storage; currently undergoing RCRA closure
7	Former Incinerator	No	Inactive
8	Hazardous Waste Storage Area No. 2	No	Active, less than 90- day storage

Note:

* A RCRA hazardous waste management unit is one that currently requires or formerly required submittal of a RCRA Part A or Part B permit application.



Solid Waste Management Units (SWMU)

1. Hazardous Waste Storage Area No. 1
2. Nonhazardous Waste Storage Areas
3. Wastewater Treatment Unit
4. Hazardous Waste Satellite Accumulation Areas
5. Former Hazardous Waste Storage Area No. 1
6. Former Hazardous Waste Storage Area No. 2
7. Former Incinerator
8. Hazardous Waste Storage Area No. 2

Areas of Concern (AOC)

1. Trichloroethene Spill Area

**General Electric Company
Electrical Distribution and Control Division
Bloomington Facility**

**Figure 2
FACILITY LAYOUT/SWMU AND AOC LOCATIONS**

Scale: 1" = 112'
Source: Modified from GE sketch received
by RAI on January 24, 1992



Resource Applications, Inc.

TABLE 2
SOLID WASTES

<u>Waste/EPA Waste Code</u>	<u>Source</u>	<u>Primary Management Unit*</u>
Waste paint/F003/F005	Cleaning of paint booth's hand-held spray gun and dried paint	1 and 4
Paint sludge/D001	Cleaning of both the paint booth's water curtain and the electrophoretic dip tank	1
Spent TCA/F001/F002	Vapor degreaser and cleaning of baths in plating process	1, 5, and 6
Wastewater treatment sludge and spent filters/F006	Wastewater Treatment Unit	3, 5, 6, and 8
Special waste polyester paint/NA**	Powder paint booth	2
Special waste grinding sludge/NA**	Grinding machine	2
Nonhazardous waste oil and coolant/NA**	Maintenance of machines	2
Nonhazardous washer sludge/NA**	Cleaning of parts	2
Spent aerosol cans/NA**	Maintenance	1 and 4
Spent TCE/F001	Degreaser	5
Spent naphtha/D001	Degreaser	5 and 6

Note:

* Primary management unit refers to a SWMU that currently manages or formerly managed the waste.

** Nonapplicable (NA) designates nonhazardous waste.

*** Waiting for lab analysis for determination of hazardous constituents.

TABLE 2 (cont'd)

SOLID WASTES

<u>Waste/EPA Waste Code</u>	<u>Source</u>	<u>Primary Management Unit*</u>
Spent Freon/F001	Degreaser	5 and 6
Spent methylene chloride/F002	Painting process	5 and 6
Spent ferric chloride/D002	Chemical etching of circuit boards	5 and 6
Office waste/NA**	Administrative areas	7
Concrete/NA***	Trichloroethene Spill Area	8

Note:

- * Primary management unit refers to a SWMU that currently manages or formerly managed the waste.
- ** Nonapplicable (NA) designates nonhazardous waste.
- *** Waiting for lab analysis for determination of hazardous constituents.

During the painting process, waste paint (F003/F005) is generated from cleaning spray guns in the paint booths. This waste consists of dried paint, gloves, and rags and is accumulated in 15-gallon metal containers at the Hazardous Waste Satellite Accumulation Areas (SWMU 4). The paint waste is transferred into 55-gallon drums and stored in Hazardous Waste Drum Storage Area No. 1 (SWMU 1). Another painting process waste, paint sludge (D001), is generated when the paint booth water curtain's settling tank is cleaned and also when the electrophoretic dip tank is cleaned. The paint sludge is put into 55-gallon drums and stored in SWMU 1. Liquid paint waste generated from the cleaning of the electrophoretic dip tank is discharged by hose to a drain in the paint room that leads to the Wastewater Treatment Unit (SWMU 3). About 81 gallons per month of paint waste (F003/F005) are generated. Approximately 103 gallons per month of paint sludge (D001) are generated. Both wastes are picked up by Safety-Kleen Corporation (Safety-Kleen) of Dolton, Illinois and incinerated.

Spent TCA (F001/F002) is generated from a vapor degreaser and also when the baths in the plating process are cleaned. Still bottoms from the degreaser and waste from the baths are put into 55-gallon drums and stored in SWMU 1. About 71 gallons of this waste are generated per month. Safety-Kleen transports this waste to their facility in Dolton, Illinois, for recycling.

Wastewater treatment sludge (F006) is generated from the Wastewater Treatment Unit (SWMU 3) during the treatment of plating and painting process wastewaters at the facility. This waste is transferred from 1-cubic-yard steel dumpsters to roll-off boxes and stored in Hazardous Waste Storage Area No. 2 (SWMU 8). About 234 gallons of this waste are generated monthly. Spent filters (F006) from the filter press are also put into the roll-off boxes and stored at SWMU 8. About 20 cubic yards of this waste are generated when the filters are replaced. The wastewater treatment sludge and filters are transported off site by Enviroline, Inc., of Harvey, Illinois, to reclaim the metals using a pyrolytic recovery technique. The treated wastewater is discharged into the sanitary sewer. The Bloomington and Normal Water Reclamation District (BNWRD) requires GE to monitor the wastewater that is discharged into the sewer three times a week using 24-hour composites.

A nonhazardous polyester paint waste is generated during the powder painting of some of GE's products. This waste is stored in one 55-gallon drum in one of the Nonhazardous Waste Storage Areas (SWMU 2). The polyester paint waste is manifested as a special waste. About 12

cubic yards of this waste are generated monthly. The waste is transported by Commercial Disposal, Inc. (CDI) of Bloomington, Illinois, and landfilled at the Sexton-McLean County Landfill in Bloomington, Illinois.

The GE facility also generates a grinding sludge that is manifested as a special waste. This waste is generated from the grinding machine and cannot be recycled back into the process. A maximum of 50 cubic yards of this waste is generated annually. The grinding sludge is transported by CDI to be disposed of at the Sexton-McLean County Landfill in Bloomington, Illinois.

During maintenance of machines, nonhazardous waste oil and waste coolant are generated. This waste is accumulated in a container and then transferred to a 55-gallon drum, and stored in SWMU 2. About 160 gallons of this waste are generated monthly. This waste is picked up by Safety-Kleen for fuel blending.

After machining, parts are cleaned by a soap and water solution in the machining area of the facility. This process generates a nonhazardous washer sludge. The washer sludge is placed into 55-gallon steel drums and stored at SWMU 2. About 5 gallons of this waste is generated yearly. This waste is being stored at SWMU 2, and has not been disposed of since 1985.

Spent aerosol cans are generated from regular maintenance in the facility. GE is currently accumulating the cans at SWMU 4 and then storing them at SWMU 1. GE has not accumulated enough of this waste to dispose of it.

Assorted scrap metals are generated during the machining and punching processes. The scrap metal is segregated into barrels according to composition and then recycled back into the process. The scrap metal that cannot be recycled at the facility is sold to Morris Tick, Inc., a local recycler in Bloomington, Illinois.

GE previously generated spent TCE (F001), spent naphtha (D001), and spent Freon (F001) from the degreasing of metal parts. The facility decreased its use of those chemicals and now uses vapor degreasers serviced by Safety-Kleen. The hazardous wastes generated from degreasing were

put into 55-gallon drums and stored in the Former Hazardous Waste Storage Area No. 1 (SWMU 5). Spent Freon was also stored in the Former Hazardous Waste Storage Area No. 2 (SWMU 6).

Other wastes formerly generated were spent methylene chloride (F002) from the painting process, and spent ferric chloride (D002) generated from chemical etching of circuit boards. These wastes were put into 55-gallon drums and stored in both SWMUs 5 and 6.

Office trash and wood skids were incinerated by the Former Incinerator (SWMU 7). The incinerator was removed in 1972.

During soil excavation of the Trichloroethene Spill Area concrete was removed and placed in two steel dumpsters in SWMU 8. GE is waiting for lab analysis to dispose of this waste.

The GE facility has 15 vapor degreasers throughout the plant. They are all serviced and maintained by Safety-Kleen. By the end of February 1992, GE plans to have installed an aqueous washer to clean parts and would replace the vapor degreasers.

2.4 HISTORY OF DOCUMENTED RELEASES

This section discusses the history of documented releases to ground water, surface water, air, and on-site soils at the GE facility.

On January 24, 1991, approximately 100 gallons of TCE were spilled onto a cement pad and surrounding soil from a 1,000-gallon aboveground storage tank. The spill was reported to the Illinois Emergency Services and Disaster Agency (IESDA) on January 24, 1991 (IESDA, 1991). A broken valve on the tank caused this release. About 50 cubic yards of TCE-contaminated soil have been removed. The TCE tank and remaining TCE product have been removed off site. The TCE-contaminated soil was transported by Peoria Disposal Company and disposed of by EnviroSAFE Services of Ohio, Inc., of Oregon, Ohio (GE, 1991). Concrete that was removed in the area is awaiting laboratory analysis prior to disposal. The concrete is currently being managed in two dumpsters (SWMU 8). The TCE tank was cleaned and sold to Morris Tick, Inc., of Bloomington, Illinois. GE has contracted Harza Environmental Services, Inc. (Harza) to perform sampling of the

area (AOC 1) to determine if further remediation is necessary. GE also contracted Harza to perform soil sampling of the two former hazardous waste storage areas (SWMUs 5 and 6) and the area of the Former Incinerator (SWMU 7). Sampling was conducted in October 1991, according to the closure plan that was approved by IEPA on June 12, 1991 (IEPA, 1991a).

Twelve soil samples were collected from six locations in the area of SWMU 5. The toxicity characteristic leaching procedure (TCLP) results for cadmium revealed that some samples exceeded the RCRA regulatory level of 1 milligram per liter (mg/L).

Ten soil samples were collected from five locations in the area of SWMU 6. TCE was detected in samples taken around the southern half of the pad. Harza determined this was caused from the 1991 TCE spill.

For soil samples collected in the area of the Former Incinerator (SWMU 7), TCLP detected cadmium and lead. Included in Attachment D are the summary results from sampling in the location of SWMUs 5, 6, and 7. GE submitted the sampling results to IEPA in December 1991 and is awaiting IEPA's approval.

2.5 REGULATORY HISTORY

GE submitted a Notification of Hazardous Waste Activity to EPA on August 11, 1980 (GE, 1980a). The facility submitted a RCRA Part A permit application on November 11, 1980 (GE, 1980b). This application listed the following process codes and capacities: a drum storage unit (S01) with a 11,000-gallon capacity (SWMU 5), and a tank unit (T01) with a 6,000-gallon per hour capacity.

The application listed the following waste codes: F001, F007, F008, F009, F010, and F017. The tank unit (T01) with a 6,000-gallon per hour capacity is a RCRA exempt wastewater treatment unit that was listed on the Part A in error. GE amended their Part A permit application on January 26, 1985 and removed its wastewater treatment unit. This application listed the following wastes F001, F002, F003, F006, D001, and D007 (GE, 1985). GE again amended their Part A permit

application on May 23, 1986. This application listed the following waste codes: F001, F002, D001, F003, F005, D007 and F006 (GE, 1986).

GE generated a spent silver solution (F007, F008, F009) from a silver plating line before the Wastewater Treatment Unit was upgraded. Facility representatives also stated that the F010 waste listed on the Part A permit was probably never generated. GE also generated a F017 waste from an industrial printing process. In GE's amended Part A permit application this waste was reclassified as F003/F005. GE is currently in the process of amending their Part A permit (GE, 1992c).

The facility is currently closing the following units: the Former Hazardous Waste Storage Area No. 1 (SWMU 5) and the Former Hazardous Waste Storage Area No. 2 (SWMU 6). The Former Hazardous Waste Storage Area No. 2 was an unpermitted storage area that was used from 1980 to 1981. IEPA approved the May 1991 closure plan on June 12, 1991 (IEPA, 1991a). Facility representatives plan to complete closure some time in 1992 upon IEPA approval.

In the past, GE has had minor RCRA compliance problems. These violations, observed during routine inspections by IEPA from 1981 through 1991, pertained mainly to deficiencies in paperwork such as inspection logs, training records, contingency plans, waste analysis plan, closure plan, labelling drums, and land disposal restriction notifications. No compliance orders were issued as a result of the inspections (IEPA, 1981, 1983a, 1983b, 1984a, 1984b, 1986, 1987, 1989, 1991b).

The facility is required to have one all-encompassing air permit that regulates numerous production processes. The air permit, No. 74070052, expires on December 5, 1993 (IEPA, 1990). The facility is not required to have a National Pollutant Discharge Elimination System (NPDES) permit. BNWRD requires GE to have a permit to discharge wastewater into the sanitary sewer. The discharge permit, BNWRD 92-01, expires on December 31, 1992 (BNWRD, 1991).

2.6 ENVIRONMENTAL SETTING

This section describes the climate, flood plain and surface water, geology and soils, and ground water in the vicinity of the GE facility.

2.6.1 Climate

The climate in McLean County is typically continental with cold winters, warm summers, and frequent short period fluctuations in temperature, humidity, cloudiness, and wind direction. The average daily temperature is 52.5°F. The lowest average daily temperature is 17.0°F in January. The highest average daily temperature is 86.6°F in July.

The total annual precipitation for the county is 36.41 inches (NOAA, 1975). The mean annual lake evaporation for the area is about 32.5 inches (USDC, 1968). The 1-year, 24-hour maximum rainfall is 3.89 inches (NOAA, 1975).

The prevailing wind is from the south. Average wind speed is highest in March at 12.1 miles per hour from the west-northwest. The average annual wind speed is 10.0 miles per hour (NOAA, 1990).

2.6.2 Flood Plain and Surface Water

The facility is located outside the 100-year flood plain, in an area of minimal flooding (BNWRD, 1992). The nearest surface water, Sugar Creek, is located 0.2 mile north of the facility building, and is used for recreational purposes. This surface water body discharges via Kickapoo Creek, Salt Creek, and Greenview Creek into the Sangamon River. The Sangamon River ultimately discharges into the Illinois River.

Surface water drainage at the facility is directed into the sewer, which flows to BNWRD treatment works. The facility does not hold a NPDES permit. There are no other major surface water bodies or wetlands in the vicinity.

2.6.3 Geology and Soils

The facility is underlain by soils of the Urban land complex; this unit consists of areas covered by pavement and buildings, where the original soils are unidentifiable due to cutting and

filling, during construction. Surface runoff is rapid; water is diverted into storm drainage systems (USDA, 1992).

No site-specific information was available regarding drift or bedrock geology; thus regional information is presented below. Unconsolidated deposits, or drift, of Pleistocene and recent ages overlie the eroded bedrock surface. The bulk of drift deposits are known as till, which is a relatively impermeable, clayey silt deposit. The uppermost Wisconsinan deposits are generally fine-grained sandy silts, and are approximately 100 feet thick. Beneath these, the Illinoian deposits contain widespread lenses of sand and gravel intercalated in the till; these lenses are a fairly significant source of ground water. Pre-Illinoian deposits do not occur in the Bloomington-Normal area. The approximate total thickness of drift deposits beneath the facility is 200 feet (Stephenson, 1967).

The uppermost bedrock underlying the facility is of Pennsylvanian age, and consists of impermeable shale, with some thin, discontinuous lenses of limestone and sandstone. These rocks are part of the Carbondale and Modesto formations. Beneath the Pennsylvanian deposits are Mississippian rocks, mainly consisting of limestones with some shales, siltstones, and sandstones. Silurian rocks of the Alexandrian and Niagaran formations occur below the Mississippian rocks; these are predominantly dolomites. The Ordovician Maquoketa Shale is a 50-foot-thick layer of impermeable shale which acts as a cap on the underlying Galena-Platteville dolomites and limestones, which are about 350 feet thick. The Glenwood-St. Peter sandstones and sandy limestones lie beneath the carbonates, and are 250 feet thick. The Knox Megagroup consists of 1,250 feet of Ordovician and Cambrian dolomitic sandstones and dolomites, and is underlain by the Ironton-Galesville sandstone (200 feet thick), and the Basal Sandstone Confining Unit, a 400-foot series of dolomites and impermeable shales. The deepest Paleozoic rocks are the friable white sandstones of the Elmhurst-Mount Simon series, which are approximately 2,500 feet thick and are underlain by Precambrian basement at a depth of about 6,000 feet (Visocky, et al., 1985).

2.6.4 Ground Water

No site-specific information was available regarding ground water; thus regional information is presented below. Ground water is derived from lenses of sand and gravel within the drift deposits. In the upper (Wisconsinan) units, there are a few thin, wide sand and gravel lenses, while the lower

(Illinoian) deposits are about 20% sand and gravel with the bulk of the lenses being in the lower half of the drift (between 150 and 200 feet below ground surface). These lower deposits have the best potential as aquifers. The till matrix is sufficiently impermeable that it will act as an aquitard between productive sand and gravel aquifers. Recharge rates for the sand and gravel aquifers are estimated at 150,000 gallons per day (gpd) per square mile, and recharge generally occurs as vertical leakage from precipitation. Wells penetrating Wisconsinan deposits may yield from 3 gallons per minute (gpm) to 510 gpm; those completed in Illinoian deposits yield from 3 gpm to 885 gpm (Stephenson, 1967).

The Elmhurst-Mount Simon sandstones, the Knox Megagroup, the Glenwood-St. Peter sandstones, and the Galena-Platteville dolomites yield moderate quantities of ground water. The most productive bedrock aquifer is the Cambrian Ironston-Galesville sandstone, which may yield in excess of 500 gpm. This unit is about 200 feet thick in the vicinity of the site. The Niagaran and Alexandrian dolomitic rocks of Silurian age are inconsistent in their yield, but may produce more than 1,000 gpm in fractured zones. The Cambrian and Ordovician aquifers are confined by the relatively impermeable Maquoketa Shale, although some recharge occurs by leakage through this unit. The Silurian aquifer exists under leaky artesian conditions, and recharge is from percolation of precipitation through the drift deposits. Ground water flow is to the west and north, toward Spring Creek and the Sangamon River. The water table is at approximate depth of 180 feet beneath the facility (Visocky, et al., 1985). Soil borings performed on the east side of the facility encountered clay soils containing minimum ground water to the drilled depth of 31 feet.

2.7 RECEPTORS

The GE facility occupies 65 acres in a commercial area in Bloomington, Illinois. Bloomington has a population of about 45,000.

The GE facility is bordered on the north by commercial property and GE park, on the west by commercial property, on the south by commercial property, and on the east by vacant land. The nearest school, Stevenson School, is located about 0.5 miles south of the facility. Facility access is controlled by a north gate with a security guard present 24 hours a day, 7 days a week. There is also

a south gate that is kept locked. The entire site is secured by a 7-foot high, chain-link fence, with barbed wire on top.

The nearest surface water body, Sugar Creek, is located 0.2 mile north of the facility and is used for recreational purposes. Other surface water bodies in the area include Lake Bloomington, which is located 6 miles north of the GE facility.

Surface water from Lake Bloomington is used as the drinking water supply. There are no drinking water wells or industrial wells located within 3 miles of the facility.

Sensitive environments are not located on site. There are no wetland areas or sensitive environments located within 3 miles of the facility.

3.0 SOLID WASTE MANAGEMENT UNITS

This section describes the eight SWMUs identified during the PA/VSI. The following information is presented for each SWMU: description of the unit, dates of operation, wastes managed, release controls, history of documented releases, and RAI observations.

SWMU 1

Hazardous Waste Storage Area No. 1

Unit Description:

The Hazardous Waste Storage Area is located indoors, in a room on the east side of the facility. The unit stores hazardous waste for less than 90 days. The unit measures 15 feet by 20 feet and is made of ceramic tile over a concrete floor. The floor slopes up toward the entrance (see Photograph No. 1). Floor drains are plugged in this room.

Date of Startup:

This unit began operation in mid-1991.

Date of Closure:

This unit is active.

Wastes Managed:

This unit manages wastewater treatment sludge (F006), waste paint (F003/F005), paint sludge (D001), spent TCA (F001/F002), and spent aerosol cans in containers. GE has not accumulated enough of the spent aerosol cans to warrant disposal as yet. The wastewater treatment sludge is picked up by Envirite of Harvey, Illinois for reclamation of the metals. Waste paint and spent TCA are picked up by Safety-Kleen of Dolton, Illinois for disposal. The paint sludge (D001) is also picked up by Safety-Kleen of Dolton, Illinois for incineration.

Release Controls:

The unit is located indoors, on ceramic tile, over a concrete floor. All floor drains are plugged in the room and the floor slopes up toward the entrance.

History of Documented Releases:

No releases from this unit have been documented.

Observations:

The unit contained 31 closed 55-gallon steel drums and one cardboard 55-gallon drum during the VSI. No cracks were visible in the floor. The cardboard container stored spent aerosol cans. The rest of the drums contained paint waste (F003/F005), paint sludge (D001), wastewater treatment sludge (F006), and spent TCA (F001/F002). No evidence of release was noted.

SWMU 2

Nonhazardous Waste Storage Areas

Unit Description:

This unit consists of three Nonhazardous Waste Storage Areas that are located indoors. The first area is located in a room on the east side of the facility which stores nonhazardous waste. The area measures 10 feet by 20 feet and is made of ceramic tile over a concrete floor. The floor slopes up toward the entrance (see Photograph No. 2). The second area is located in the paint room, also on the east side of the facility. This area stores special waste polyester paint. The area measures 3 feet by 3 feet and is made of an 8-inch thick concrete floor. The floor slopes north to a drain for the Wastewater Treatment Unit (SWMU 3) (see Photograph No. 6). The third area is located in the grinding machine area of the facility. This area stores special waste grinding sludge. The moveable storage area is made of an open 90-gallon metal container (see Photograph No. 7).

Date of Startup:

This unit began operation in mid-1991.

Date of Closure:

This unit is active.

Wastes Managed:

This unit manages nonhazardous waste oil, waste coolant, and special waste polyester paint and grinding sludge in containers. The oil and

coolant wastes are picked up by Safety-Kleen. The waste coolant is fuel blended and the oil is recycled. The special wastes are picked up by CDI of Bloomington, Illinois, and disposed of at the Sexton-McLean County Landfill in Bloomington, Illinois.

Release Controls:

The unit is located indoors, on concrete. The floor drains are plugged in the room where waste oil and coolant are stored. The floor slopes up toward the entrance. In the area of the special waste polyester paint there is a floor drain to the north which leads to the Wastewater Treatment Unit (SWMU 3). There were no floor drains in the area of the grinding sludge.

History of Documented Releases:

No releases from this unit have been documented.

Observations:

The room where waste oil and coolant are stored contained 10 closed drums of nonhazardous waste oil and coolant during the VSI. No cracks were visible in the floor. No evidence of release was noted. In the area where special waste polyester paint is stored, one 55-gallon drum of polyester paint waste was observed during the VSI. No cracks were visible in the floor and no evidence of release was noted. The grinding sludge was stored in one 90-gallon container during the VSI. No cracks were visible in the floor and no evidence of release was noted.

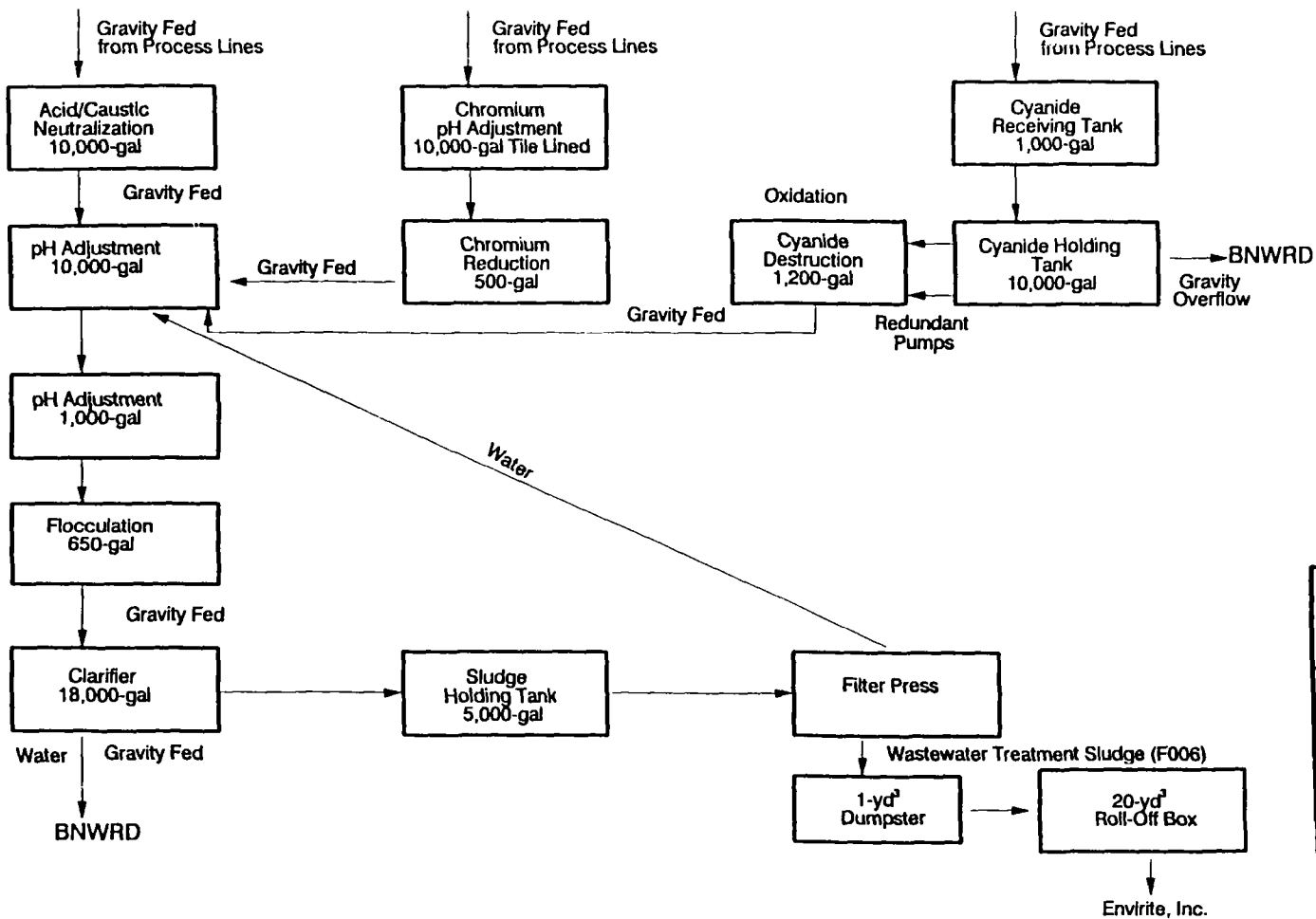
SWMU 3

Wastewater Treatment Unit

Unit Description:

The Wastewater Treatment Unit is located indoors, in a room on the east side of the facility. The unit treats wastewater from the plating and painting processes. Wastewaters from these processes are gravity fed by pipe to the unit. There are three waste streams: (1) acid waste

stream, (2) cyanide, and (3) chromium. A process flow diagram of the Wastewater Treatment Unit is shown in Figure 3. The acid waste stream first enters a 10,000-gallon concrete receiving tank, which is inground, and then flows by gravity to another 10,000-gallon concrete tank for pH adjustment, where the precipitation process starts. The wastewater is then pumped to a 1,000-gallon fiberglass tank for further pH adjustment, and the precipitation process is finished. The wastewater is then pumped to a 650-gallon fiberglass flocculation tank. A gravity-fed line moves the wastewater from the flocculation tank to an 18,000-gallon steel clarifier tank. Clarifier overflow is then gravity fed and discharged into the sanitary sewer. Two to three times a week, the sludge is pumped out of the clarifier tank to a 5,000-gallon fiberglass sludge holding tank. The sludge is then pumped into a filter press to remove excess wastewater. The excess wastewater is pumped back to the second 10,000-gallon concrete pH adjustment tank in the acid waste stream. The wastewater treatment sludge (F006) is transferred from 1-cubic-yard steel dumpsters into a 20-cubic-yard roll-off box and stored at SWMU 8. The cyanide stream first enters a 1,000-gallon fiberglass receiving tank and is then pumped to a 10,000-gallon fiberglass holding tank. Redundant pumps move the wastewater to a 1,200-gallon fiberglass tank for cyanide destruction. The second pump is used as a backup in case the first pump fails. If this should occur, an alarm will sound and the second pump will move the wastewater to the 1,200-gallon cyanide destruction tank. If both pumps were to fail and the 10,000-gallon holding tank overflowed, the wastewater would flow by gravity and discharge into the sanitary sewer. After the cyanide is destroyed, the wastewater is gravity fed to the second 10,000-gallon concrete pH adjustment tank in the acid waste stream. The chromium stream enters a 10,000-gallon concrete tank lined with acid resistant tile by



General Electric Company
Electrical Distribution and Control Division
Bloomington Facility

Figure 3
WASTEWATER TREATMENT UNIT
PROCESS FLOW DIAGRAM

Not to Scale
Source: Modified from GE sketch received
by RAI on March 11, 1992

RAI Resource Applications, Inc.

gravity-fed process lines. In this tank, the pH is adjusted. The wastewater is then pumped to a 500-gallon fiberglass chromium reduction tank. A treatment module with iron filings reduces the hexavalent chromium to trivalent chromium. The wastewater then flows by gravity-fed lines to the second 10,000-gallon concrete pH adjustment tank in the acid waste stream (see Photographs No. 3 and 4).

Date of Startup:	This unit began operation in mid-1955.
Date of Closure:	This unit is active.
Wastes Managed:	This unit manages wastewater and wastewater treatment sludge (F006) from the plating and painting processes. The treated wastewater is discharged into the sewer. The wastewater treatment sludge and spent filters (F006) are picked up by Envirite, Inc.
Release Controls:	The unit is located indoors, on the east side of the building. The unit consists of tanks and pits that have metal grating above them. There is a 6-inch concrete berm surrounding the initial acid waste stream, cyanide, and chromium receiving tanks.
History of Documented Releases:	No releases from this unit have been documented.
Observations:	The unit appeared clean and in good condition. There were no visible cracks in the floor. There were stains on the filter press, but no staining was visible on the floor in the area of the unit.

SWMU 4**Hazardous Waste Satellite Accumulation Areas****Unit Description:**

The Hazardous Waste Satellite Accumulation Areas are located by the truck dock and in the paint room. The area by the truck dock is a metal 20-gallon container which accumulates spent aerosol cans. The area in the paint room accumulates used rags and gloves in a 15-gallon metal container (see Photographs No. 5 and 6).

Date of Startup:

This unit began operation in mid-1990.

Date of Closure:

This unit is active.

Wastes Managed:

This unit manages spent aerosol cans and hazardous nonreturnable gloves and rags contaminated with paint waste and setup paint (F003/F005). The waste paint is picked up by Safety-Kleen and incinerated.

Release Controls:

The unit is located indoors, on a concrete floor.

History of Documented Releases:

No releases from this unit have been documented.

Observations:

During the VSI, the unit contained one 20-gallon container that accumulated spent aerosol cans. In the paint room, the unit contained hazardous gloves and towels (F003/F005) accumulating in one 15-gallon container. No cracks were visible in the floor. No evidence of release was noted.

SWMU 5**Former Hazardous Waste Storage Area No. 1****Unit Description:**

The Former Hazardous Waste Storage Area No. 1 is located outdoors in a 1,400-square-foot area. The unit slopes to the east and has partial

curbing; it is made of an 8-inch thick concrete pad (see Photograph No. 8).

Date of Startup: This unit began operation in mid-1980.

Date of Closure: This unit has been inactive since 1991 and is currently going through closure.

Wastes Managed: This unit formerly managed: spent 1,1,1-trichloroethane (TCA) (F001/F002), spent TCE (F001), spent naphtha (D001), spent methylene chloride (F002), spent Freon (F001), spent ferric chloride (D002), and wastewater treatment sludge (F006).

Release Controls: The unit is located outdoors, on the east side of the facility. The pad is 8-inch thick concrete with a yellow gate and partial curbing surrounding two sides.

History of Documented Releases: Soil sampling performed in October 1991 determined that cadmium was detected above the 1 mg/L TCLP level.

Observations: The unit was empty during the VSI. There were cracks in the concrete pad. No evidence of release was noted.

SWMU 6 **Former Hazardous Waste Storage Area No. 2**

Unit Description: The Former Hazardous Waste Storage Area No. 2 is a concrete area located outdoors, adjacent to the east side of the facility. The unit is approximately 40 feet by 12 feet with a canopy covering 60 percent of the unit (see Photograph No. 9).

Date of Startup: This unit began operating in 1980.

Date of Closure: This unit has been inactive since 1981 and is currently going through closure.

Wastes Managed: This unit formerly managed: spent TCA (F001/F002), spent TCE (F001), spent naphtha (D001), spent methylene chloride (F002), spent Freon (F001), spent ferric chloride (D002), and wastewater treatment sludge (F006).

Release Controls: The unit is located outdoors, adjacent to the east side of the facility. The area was covered with concrete.

History of Documented Releases: Soil sampling performed in October 1991 revealed that TCE had contaminated the area around the unit. Facility representatives think that the contamination is from the January 24, 1991 spill, not from the waste that was managed at the unit.

Observations: The unit was empty during the VSI. One crack in the concrete was visible. No visible evidence of release was noted.

SWMU 7 Former Incinerator

Unit Description: This unit was a solid waste incinerator located outdoors on the east side of the site. This unit measured approximately 20 feet by 20 feet (see Photograph No. 12).

Date of Startup: This unit was installed in 1957.

Date of Closure: This unit ceased operation in 1972 and was removed.

Wastes Managed: This unit formerly incinerated office waste, boxes, wooden skids, and other nonhazardous waste.

Release Controls: This unit is closed.

History of Documented Releases: Sampling was performed around this unit in October 1991. Cadmium and lead were detected above TCLP levels.

Observations: The unit is now a grassy swell on the east side of the site. No visual evidence of release was observed during the VSI.

SWMU 8 Hazardous Waste Storage Area No. 2

Unit Description: The Hazardous Waste Storage Area No. 2 is located outdoors, northeast of the facility. The unit stores hazardous waste in one 20-cubic-yard roll-off box and concrete in two steel dumpsters. The unit measures 40 feet by 55 feet and has an 8-inch concrete pad (see Photograph No. 10). No drains are located in the area.

Date of Startup: This unit began operation in 1991.

Date of Closure: This unit is active.

Wastes Managed: The unit manages wastewater treatment sludge (F006), spent filters (F006), and concrete removed from the Trichloroethene Spill Area. The concrete is waiting for laboratory analysis prior to disposal. Wastewater treatment sludge and spent filters are picked up by Envirite of Harvey, Illinois, for treatment by a pyrolytic recovery technique to reclaim the metals.

Release Controls: The unit is located outdoors, northeast of the facility. The pad is made of 8-inch thick concrete.

History of Documented Releases: No releases from this unit have been documented.

Observations:

The unit contained two steel dumpsters of excavated concrete waiting for disposal. No cracks were visible in the concrete pad.

4.0 AREA OF CONCERN

RAI identified one AOC during the PA/VSI. The AOC is discussed below; its location is shown in Figure 2.

AOC 1 Trichloroethene Spill Area

This area, located on the east side of the facility, was contaminated from the January 24, 1991, tank spill (see Photograph No. 11). Fifty cubic yards of soil were removed from the area, as well as the concrete overlying the soil. The soil was hauled off site by Peoria Disposal Company for disposal by EnviroSAFE Services of Ohio Inc., of Oregon, Ohio. The concrete remains on site pending laboratory analysis; it is being managed in two dumpsters (SWMU 8). Sampling performed in October 1991 revealed TCE contamination was still present in the soil. Harza Environmental Services, Inc. prepared a work plan proposing TCE investigation at the GE site for continuing remediation (GE, 1992a).

5.0 CONCLUSIONS AND RECOMMENDATIONS

The PA/VSI identified eight SWMUs and one AOC at the GE facility. Background information on the facility's location, operations, waste generating processes, history of documented releases, regulatory history, environmental setting, and receptors is presented in Section 2.0. SWMU-specific information, such as the unit's description, dates of operation, wastes managed, release controls, history of documented releases, and observed condition, is discussed in Section 3.0. The AOC is discussed in Section 4.0. Following are RAI's conclusions and recommendations for each SWMU and AOC. Table 3 identifies the SWMUs and AOC at the GE facility and recommended further actions.

SWMU 1 Hazardous Waste Storage Area

Conclusions: This area is located indoors and stores waste paint (F003/F005), paint sludge (D001), spent TCA (F001/F002), and spent aerosol cans.

The unit has a low potential for release to ground water, surface water, air, and on-site soils. The unit has a ceramic tile floor over concrete with a berm at the entrance to the room. All floor drains are plugged in the room. Drums are properly sealed.

Recommendations: RAI recommends no further action at this time.

SWMU 2 Nonhazardous Waste Storage Areas

Conclusions: The areas are located indoors and store nonhazardous waste oil, waste coolant, and special waste polyester paint and grinding sludge.

The unit has a low potential for release to ground water, surface water, air, and on-site soils. The area that stores waste oil and coolant has ceramic tile over a concrete floor and floor drains are plugged. The area that stores special waste polyester paint has a concrete floor that slopes north to the

TABLE 3
SWMU AND AOC SUMMARY

<u>SWMU</u>	<u>Operational Dates</u>	<u>Evidence of Release</u>	<u>Suggested Further Action</u>
1. Hazardous Waste Storage Area No. 1	1991 to present	None	No further action is suggested at this time.
2. Nonhazardous Waste Storage Areas	1991 to present	None	No further action is suggested at this time.
3. Wastewater Treatment Unit	1955 to present	None	No further action is suggested at this time.
4. Hazardous Waste Satellite Accumulation Areas	1990 to present	None	No further action is suggested at this time.
5. Former Hazardous Waste Storage Area No. 1	1980 to 1991	October 1991 soil sampling revealed cadmium contamination	Remediation of cadmium-contaminated soil.
6. Former Hazardous Waste Storage Area No. 2	1980 to 1981	October 1991 soil sampling revealed TCE contamination	Remediation of TCE-contaminated soil.
7. Former Incinerator	1957 to 1972	October 1991 soil sampling revealed cadmium and lead contamination	Remediation of cadmium and lead-contaminated soil.
8. Hazardous Waste Storage Area No. 2	1991 to present	None	No further action is suggested at this time.

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TABLE 3

SWMU AND AOC SUMMARY CONTINUED

<u>AOC</u>	<u>Operational Dates</u>	<u>Evidence of Release</u>	<u>Suggested Further Action</u>
1. Trichloroethene Spill Area	1971 to present	January 24, 1991, 100 gallons of TCE	Continue remediation activities.

wastewater treatment unit drain. The area that stores the special waste grinding sludge has a concrete floor. Also, the wastes are nonhazardous.

Recommendations: RAI recommends no further action at this time.

SWMU 3 Wastewater Treatment Unit

Conclusions: The unit is located indoors and manages wastewater and wastewater treatment sludge (F006) from the plating and painting processes.

The unit has a low potential for release to ground water, surface water, air, and on-site soils. The floor area is concrete and there is a 6-inch berm surrounding the initial receiving tanks. There is a gravity overflow to the BNWRD from the 10,000-gallon cyanide holding tank.

Recommendations: RAI recommends no further action at this time.

SWMU 4 Hazardous Waste Satellite Accumulation Areas

Conclusions: The areas are located indoors and manage spent aerosol cans and waste paint (F003/F005).

The unit has a low potential for release to ground water, surface water, air, and on-site soils. The containers are stored closed on a concrete floor.

Recommendations: RAI recommends no further action at this time.

SWMU 5 Former Hazardous Waste Storage Area No. 1

Conclusions: This unit is located outdoors, and previously stored spent TCA (F001/F002), spent TCE (F001), spent naphtha (D001), spent methylene chloride (F002), spent Freon (F001), spent ferric chloride (D002), and wastewater treatment

sludge (F006). The unit is currently undergoing closure for greater than 90-day storage. The unit has not stored waste since 1991.

Soil sampling in October 1991 revealed that cadmium was detected in on-site soil samples. Potential for release to surface water, ground water, and air is low, since the waste is no longer stored at this unit.

Recommendations: RAI recommends remediation of the cadmium-contaminated area.

SWMU 6 Former Hazardous Waste Storage Area No. 2

Conclusions: This unit is located outdoors, and previously stored spent TCA (F001/F002), spent TCE (F001), spent naphtha (D001), spent methylene chloride (F002), spent Freon (F001), spent ferric chloride (D002), and wastewater treatment sludge (F006). The unit is currently undergoing closure for greater than 90 day storage. The unit has not stored waste since 1991.

Soil sampling was performed at SWMU 6 in October 1991. TCLP results indicated TCE was detected in on-site samples. Potential for release to ground water, surface water and air is low, since waste is no longer stored at this unit.

Recommendations: RAI recommends the remediation of the TCE-contaminated soil.

SWMU 7 Former Incinerator

Conclusions: This unit was located outdoors, on the east side of the site. The unit incinerated office waste and wood skids. It ceased operation in 1972 and was later removed.

Soil sampling in October 1991 revealed that lead and cadmium were released to the soil. The level of contamination exceeded soil objectives set by IEPA

for closing SWMUs 5 and 6. Potential for release to ground water, surface water, and air is low, since waste is no longer stored at this unit.

Recommendations: RAI recommends remediation of the cadmium and lead-contaminated soil.

SWMU 8 Hazardous Waste Storage Area No. 2

Conclusions: This unit is located outdoors, and stores wastewater treatment sludge and filters (F006) in a 20-cubic-yard roll-off box and two steel dumpsters of concrete removed from the Trichloroethene Spill Area.

The unit has a low potential for release to ground water, surface water, air, and on-site soils. The roll-off boxes are stored closed on an 8-inch concrete pad.

Recommendations: RAI recommends no further action at this time.

AOC 1 Trichloroethene Spill Area

Conclusions: This area of soil is located on the east side of the facility that was contaminated from the January 24, 1991, tank spill. Sampling performed in October 1991 revealed TCE contamination was still present in the soil.

Recommendations: RAI recommends the facility continue remediation activities with IEPA approval.

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ATTACHMENT A

EPA PRELIMINARY ASSESSMENT FORM 2070-12



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 1 - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION

01 STATE
ILD

02 SITE NUMBER
005 453 691

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)
General Electric Company - Electrical Distribution and Control Division

02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
1801 GE Road

03 CITY
Bloomington

04 STATE
IL

05 ZIP CODE
61702

06 COUNTY
McLean

07 COUNTY CODE

08 CONG DIST

09 COORDINATES: LATITUDE
40 30 00.N

LONGITUDE
088 57 00.W

10 DIRECTIONS TO SITE (Starting from nearest public road)

I 55 south to Business 55 (which is also called Veterans Parkway) to GE Road, make a left (east) on to GE Road, and the facility is on the right.

III. RESPONSIBLE PARTIES

01 OWNER (if known)
General Electric Company

02 STREET (Business, mailing, residential)
Appliance Park

03 CITY
Louisville

04 STATE
KY

05 ZIP CODE
40225

06 TELEPHONE NUMBER
(502) 452-4311

07 OPERATOR (if known and different from owner)
General Electric Company - Electrical Distribution and Control Division

08 STREET (Business, mailing, residential)
1801 GE Road

09 CITY
Bloomington

10 STATE
IL

11 ZIP CODE
61702

12 TELEPHONE NUMBER
(309) 662-4311

13 TYPE OF OWNERSHIP (Check one)
☒ A. PRIVATE ☐ B. FEDERAL: _____ (Agency name)
☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL
☐ F. OTHER _____ (Specify)
☐ G. UNKNOWN

14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply)

☒ A. RCRA 3010 DATE RECEIVED: 11 / 11 / 80 ☐ B. UNCONTROLLED WASTE SITE (CERCLA 103 c) DATE RECEIVED: ____ / ____ / ____ ☐ C. NONE
MONTH DAY YEAR MONTH DAY YEAR

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION BY (Check all that apply)
☒ YES DATE 01 / 24 / 92 ☐ A. EPA ☒ B. EPA CONTRACTOR ☐ C. STATE ☐ D. OTHER CONTRACTOR
☐ NO ☐ E. LOCAL HEALTH OFFICIAL ☐ F. OTHER: _____ (Specify)
CONTRACTOR NAME(S): Resource Applications, Inc.

02 SITE STATUS (Check one)
☒ A. ACTIVE ☐ B. INACTIVE ☐ C. UNKNOWN

03 YEARS OF OPERATION
1955 | Present
BEGINNING YEAR ENDING YEAR ☐ UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED

Wastes handled by GE are: waste paint, spent 1,1,1-trichloroethane, waste oil and coolant, and grinding sludge.

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION

A release of 100 gallons of trichloroethene to soil occurred on January 24, 1991, and remediation of the area is currently in progress.

During closure activities for former hazardous waste storage areas soil sampling in October 1991 revealed: trichloroethene, lead, and cadmium contamination outside of the facility in the areas of the former incinerator and former hazardous waste storage areas.

Currently there is a low potential of release from all SWMUs to environmental media at the site.

V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents.)
☐ A. HIGH (Inspection required promptly) ☐ B. MEDIUM (Inspection required) ☒ C. LOW (Inspect on time-available basis) ☐ D. NONE (No further action needed; complete current disposition form)

VI. INFORMATION AVAILABLE FROM

01 CONTACT
Kevin Pierard

02 OF (Agency/Organization)
EPA Region 5

03 TELEPHONE NUMBER
(312) 886-4448

04 PERSON RESPONSIBLE FOR ASSESSMENT
Laura Czajkowski

05 AGENCY

06 ORGANIZATION
Resource Applications, Inc.

07 TELEPHONE NUMBER
(312) 332-2230

08 DATE
01 / 22 / 92
MONTH DAY YEAR

ATTACHMENT B

VISUAL SITE INSPECTION SUMMARY AND PHOTOGRAPHS

VISUAL SITE INSPECTION SUMMARY

General Electric Company
Bloomington, Illinois
ILD 005 453 691

Date: January 24, 1992

Facility Representatives: Chris Boehm, Environmental Specialist
Paul Isabella, Plant Manager
Mark Sasek, Manager-Environmental, Health, & Safety

Inspection Team: Laura Czajkowski, Resource Applications, Inc. (RAI)
Peter McLaughlin, RAI

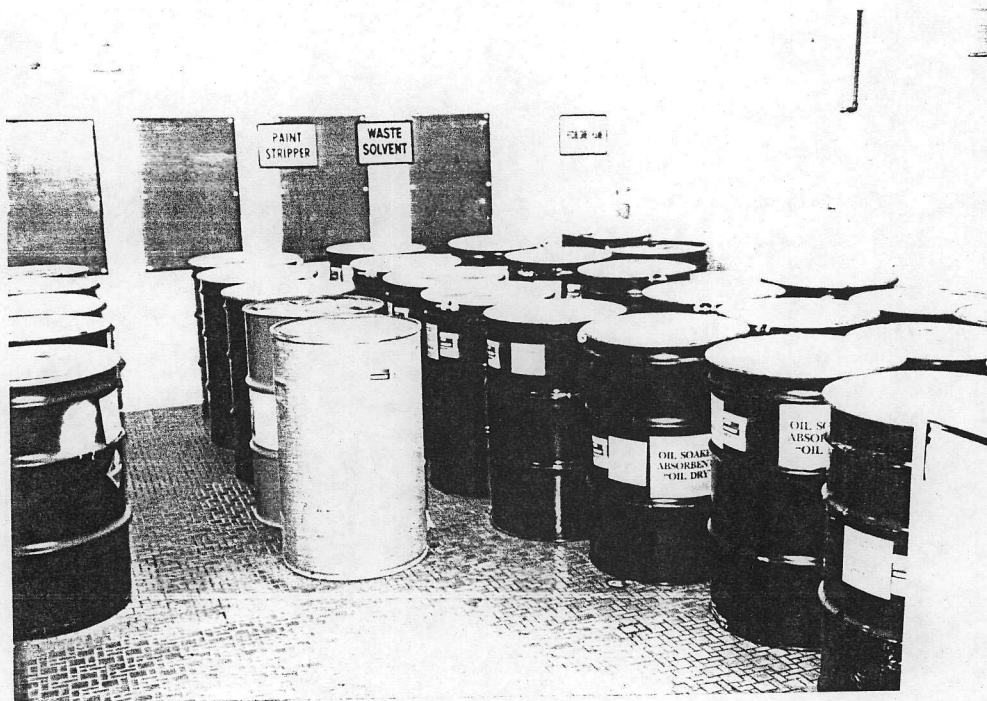
Photographer: Peter McLaughlin

Weather Conditions: Calm, sunny, temperature about 25°F.

Summary of Activities: The visual site inspection (VSI) began at 9:20 a.m. with an introductory meeting. The inspection team discussed the purpose of the VSI and the agenda for the visit. Facility representatives then discussed the General Electric Company's (GE) past and current operations, solid wastes generated, and release history. Most of the information was exchanged on a question-and-answer basis. GE representatives provided the inspection team with copies of documents requested.

The VSI tour began at 12:20 p.m. The definite purpose components assembly was the first area viewed. The next area viewed was machining and welding. The plating lines were then inspected followed by the hazardous and nonhazardous storage areas. The room containing the wastewater treatment unit was viewed next. The painting rooms were then toured and the area where the aqueous washer will be installed. The tour was then conducted outside and the two former hazardous waste storage areas, former incinerator, and the trichloroethene spill area were viewed.

The tour concluded at 2:30 p.m., after which the inspection team held an exit meeting with Chris Boehm, Paul Isabella, and Mark Sasek. The VSI was completed and the inspection team left the facility at 3:00 p.m.



Photograph No. 1

Orientation: North

Location: SWMU 1

Date: 01/24/92

Description: Hazardous Waste Storage Area. Drums contain spent TCA (F001/F002), waste paint (F003/F005), spent aerosol cans (brown drum), and nonreturnable gloves and rag waste (F003/F005).



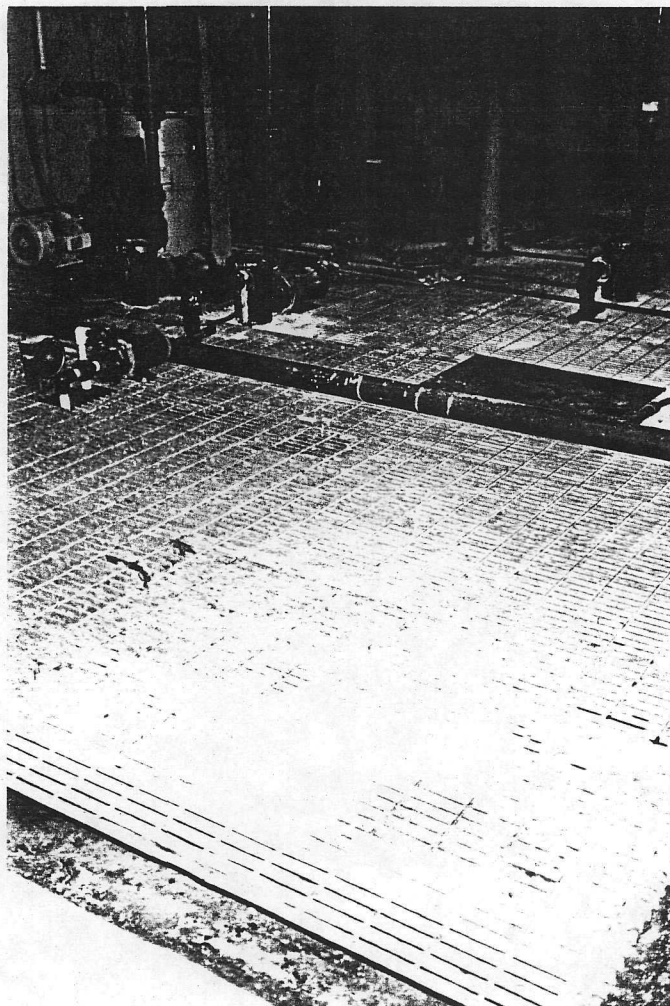
Photograph No. 2

Orientation: North

Location: SWMU 2

Date: 01/24/92

Description: Nonhazardous Waste Storage Area. Drums contain nonhazardous waste oil and nonhazardous washer sludge.



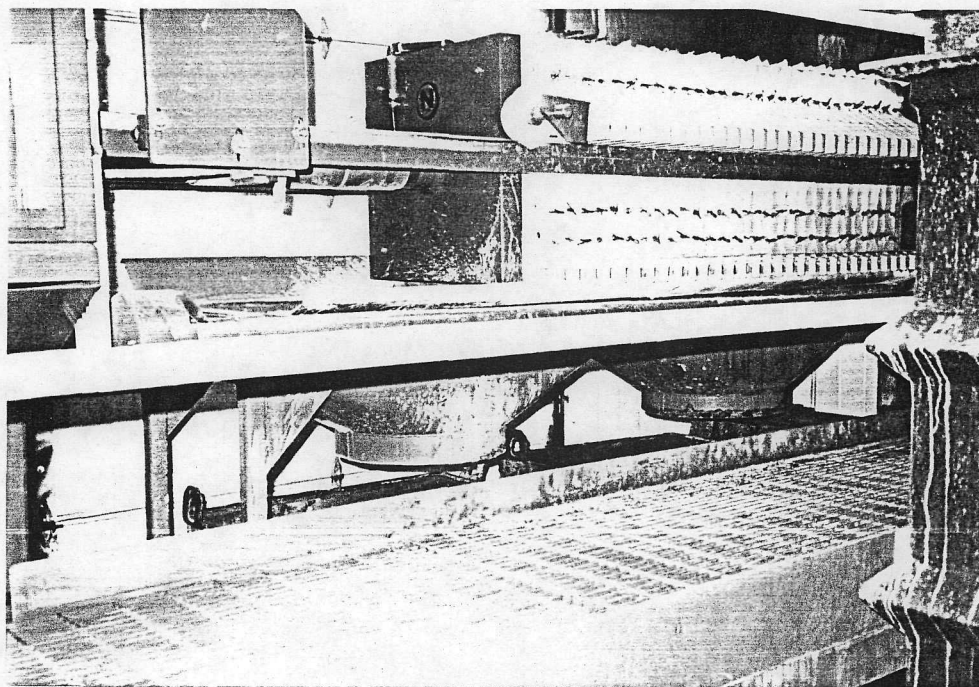
Photograph No. 3

Orientation: North

Description: Wastewater Treatment Unit. Acid waste stream, chromium, and cyanide receiving tanks.

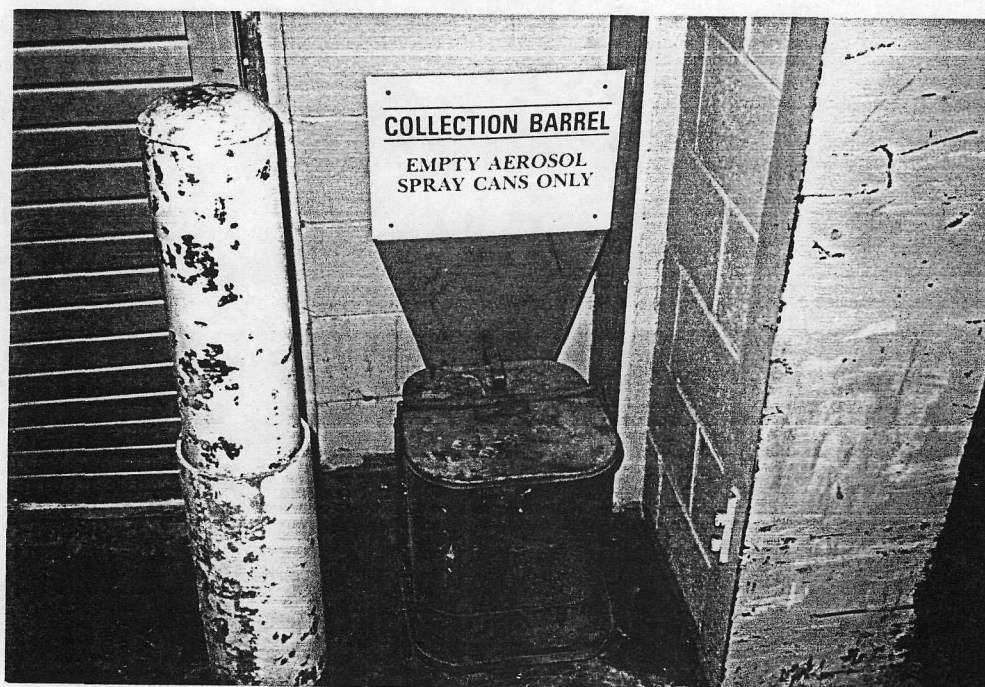
Location: SWMU 3

Date: 01/24/92



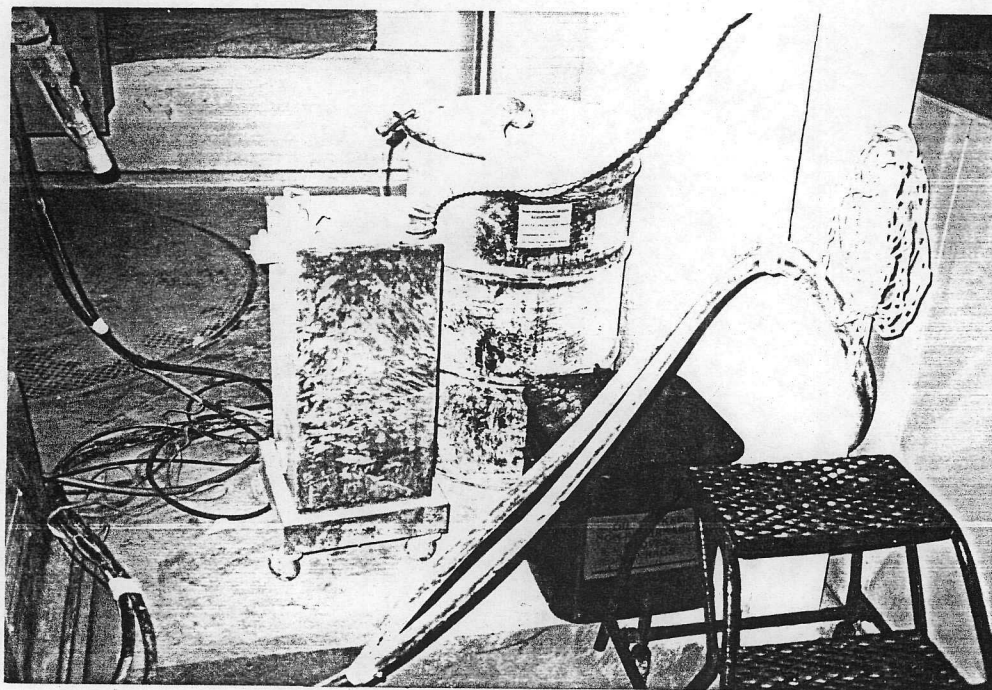
Photograph No. 4
 Orientation: East
 Description: Filter press for Wastewater Treatment Unit

Location: SWMU 3
 Date: 01/24/92



Photograph No. 5
 Orientation: East
 Description: Hazardous Waste Satellite Accumulation Area of empty aerosol spray cans

Location: SWMU 4
 Date: 01/24/92



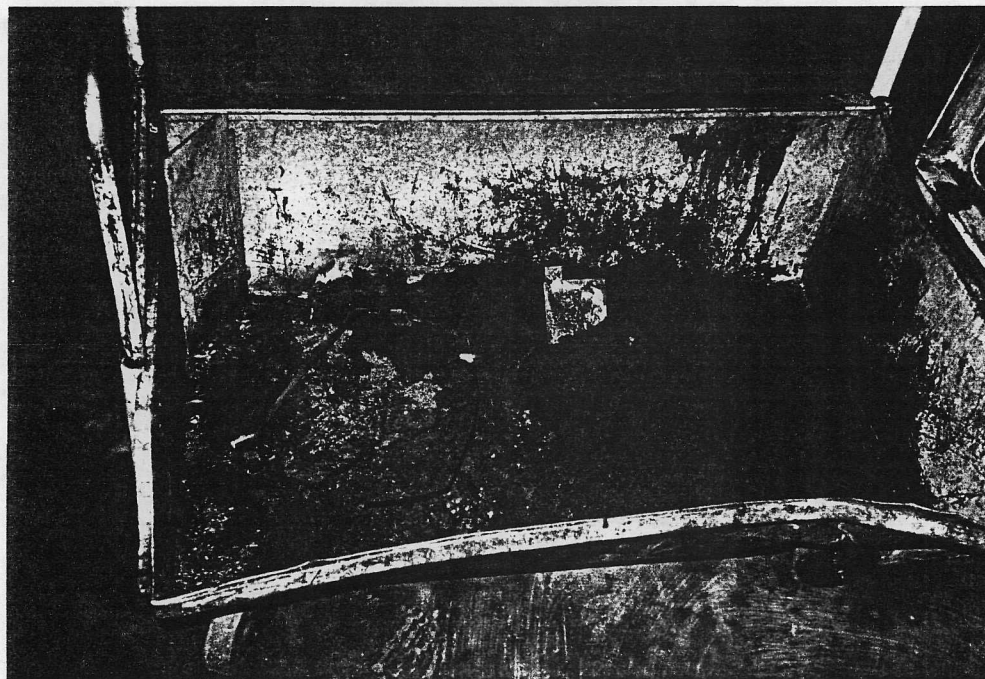
Photograph No. 6

Orientation: East

Description: The red container accumulates waste rags and gloves (F003/F005-SWMU 4). The 55-gallon drum stores special waste polyester paint (SWMU 2).

Location: SWMUs 4 and 2

Date: 01/24/92



Photograph No. 7

Orientation: West

Description: The 90-gallon metal container stores special waste grinding sludge.

Location: SWMU 2

Date: 01/24/92



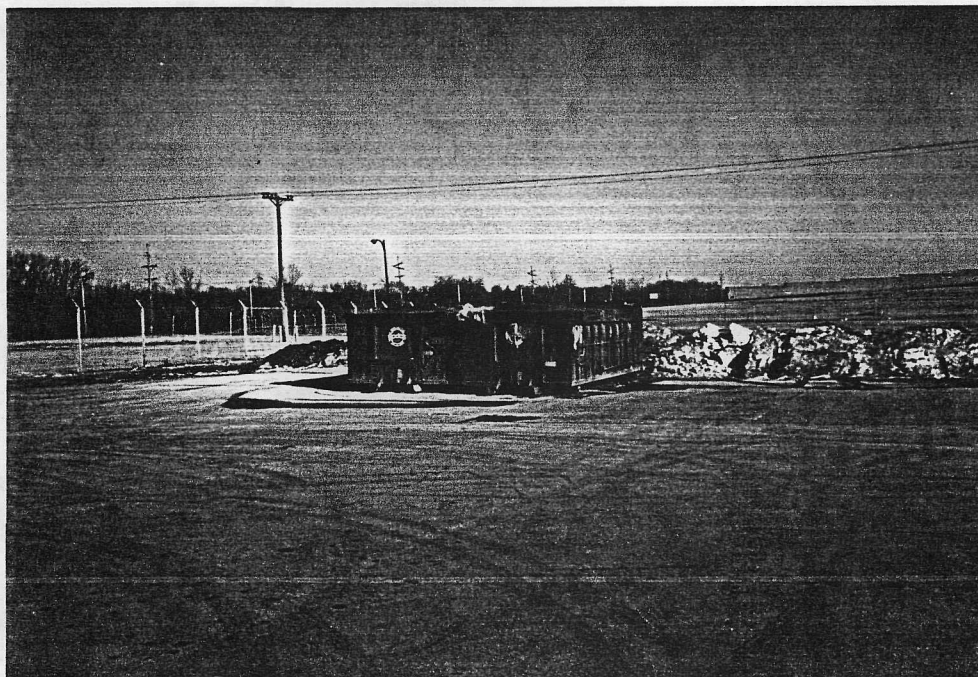
Photograph No. 8
 Orientation: East
 Description: Former Hazardous Waste Storage Area No. 1

Location: SWMU 5
 Date: 01/24/92



Photograph No. 9
 Orientation: North
 Description: Former Hazardous Waste Storage Area No. 2

Location: SWMU 6
 Date: 01/24/92



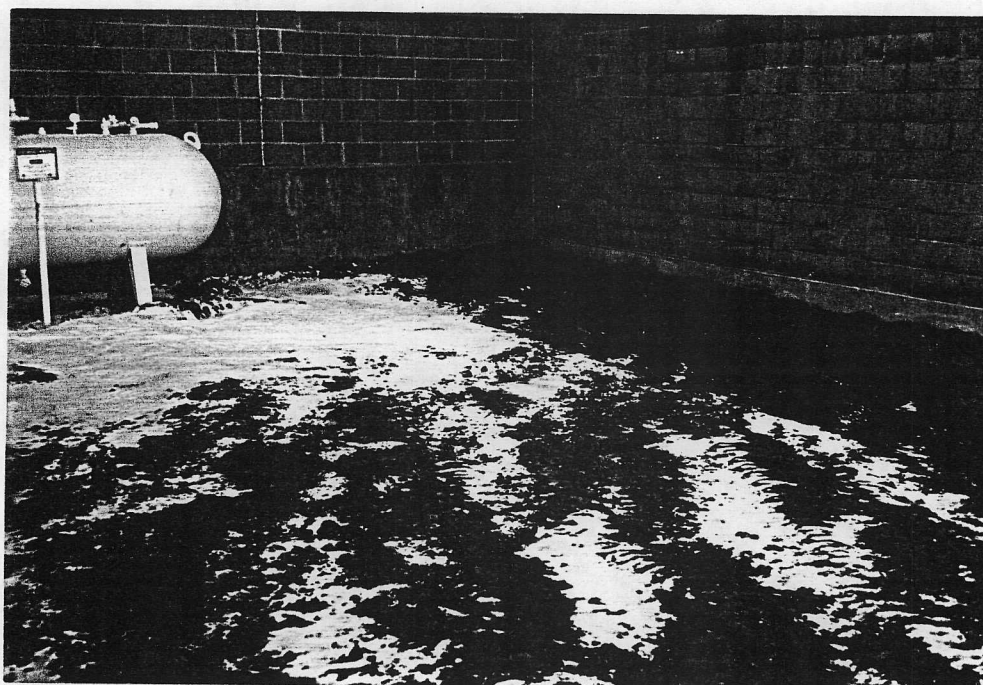
Photograph No. 10

Orientation: Northeast

Location: SWMU 8

Date: 01/24/92

Description: This is the Hazardous Waste Storage Area No. 2. The two steel dumpsters contain concrete that was removed from the Trichloroethene Spill Area.



Photograph No. 11

Orientation: West

Location: AOC 1

Date: 01/24/92

Description: Trichloroethene Spill Area



Photograph No. 12

Orientation: East

Description: Site of the Former Incinerator, past the cement area and before the fence.

Location: SWMU 7

Date: 01/24/92

ATTACHMENT C
VISUAL SITE INSPECTION FIELD NOTES

GE Bloomington

9:00am

350 employees

the 2nd shift at 30%

manufacture industrial motors - assembly
of components takes place at the River Run
plant.

1955 manufacturing began
before that the land was farmland.

24 hour guard security - 2 entrances -
North and South

N - commercial property

E - vacant land → farmland

S - commercial property

W - commercial property.

North about 6 miles Lake Bloomington

Northwest about 10 miles Lake Evergreen

Stevenson School Northeast about 2 miles

Nursery School on Hensley about 1 mile

No wells on property

No NPDES permits

Discharge water to sanitary sewer after
treatment at Wastewater Treatment Unit.

JR

1/24/92
(53)

GE Bloomington

Processes at Plant -

pressure switches

definite purpose controls

sheet metal enclosures

Welding
plating - gold, zinc, nickel, tin
painting

Small amount of assembly

receiving → punched → plated →

painting → assembly → storage

Sheet metal - stainless steel
zinc die casting
aluminum
steel

Scrap metal collected at the area
accumulated in rolloff bins
and sold to local recycler.

Cleaning - 1. acid dip - nitric acid
phosphoric acid

2. burnishing - surface oxide
off before plating

3. rust preventing processes
on silicon steel

JR 1/24/92
(54)

GE Bloomington

① Gold Plating Line - (Gold Room)

- gold-nickel plate & gold-flash
- on bronze connectors
- nickel plate phosphorus bronze
- tin acid tank - to plate Cu

drain that leads from the room to the waste water treatment unit - and concentrated acid are drained to the WWTU as the waste is neutralized & metals reclaimed.

final dip for gold plating - trichloroethane perchloroethane

1 drum of EOL waste generated once every 3 to 4 mos when baths are cleaned.

Plating Room -

1.) 100-line - a.) electropolishing stainless steel phosphoric acid. waste water drained to WWTU

b.) deoxidizing process for Al use nitric acid & hydrochloric acid

c.) passivation of stainless steel cleans and polishes steel use nitric acid

JP

1/24/92

(55)

GE Bloomington

parts are then rinsed w/over flow going to WWTU.

2.) 200 line -

a.) black & cobalt oxide
this blackens the steel & then dipped in oil - use sodium hydroxide

b.) electropolishing stainless steel use sulfuric acid

c.) bright dipping Cu & Cu alloys using phosphoric and nitric acid

d.) tumbling and burnishing spec. for steel, Al, Cu

using acidic alkaline solution

e.) zinc plating w/ tank sodium hydroxide
rinse in a spin dryer

3.) 300-line

a.) clean parts in alkaline solution sodium hydroxide & phosphates

rinse tank

b.) acid dip tank sulfuric acid

c.) Ni plating tank Ni chloride
HCl acid

d.) tin plating tank sulfuric acid
sulfates

e.) silver strike tank
potassium cyanide
silver cyanide

JP

1/24/92

(56)

GE Bloomington

F. silver plate tank.
potassium + silver cyanide
rinse tanks

- 4.) 400 line - zinc plating line
- alkaline cleaning tank sodium hydroxide
 - acid dip tank HCl acid
 - zinc plate tank - sodium hydroxide
 - final dip tank
chromate conversion coating
hexavalent Cr + nitric acid

- 5.) 500 line - same as 400 line
except brighteners in dip tank

each line contains a clear
Cr tank w/ trivalent Cr + nitric acid

- 6.) 600 line - acid dip line for zinc diecasting
- alkaline cleaning tank
using sodium phosphate
sodium carbonate
 - acid dip tank - nitric hydrophobic dip
 - chromate conversion coating -
hexavalent chromium + nitric acid

JL

1/24/92
(57)

GE Bloomington

Clear chromate tank - w/ trivalent
Cr + nitric acid

Vapor degreaser - TCA in room
generates 1 drum of waste when
cleaned - this will be
eliminated by next month (February)
will be replaced by an aqueous
washer that is there, it has
to be installed.

After plating the parts move to assembly.

Painting 2 areas

80% electrocoat
powder paint

use acrylic
paints

some solvents used - methanol

- | | |
|--------------|-------------------------------------|
| 1. Clean | 5 steps - |
| 2. phosphate | alkaline cleaner |
| 3. rinse | sodium hydroxide |
| 4. dry | phosphates |
| 5. paint | phosphating tank
phosphoric acid |

water soluble paint 3 to 4% organics

JL 1/24/92
(58)

GE Bloomington

- ① ECoat - 5,000 gallon dip tank (conveyor)
paint sludge (Dool)
- ② paint shop - small parts are powder
painted.
clean phosphate use epoxy or polyurethane
powder coat
baking oven
spray the paint on.
the baking even generates powder waste.
- ③ organic/solvent based painting
generates solvent paint waste
FOOS/FOOS
- ④ powder coating -
line the cast
generates waste powder
all chemical tanks in painting
are connected by drain to WWTU
paint shop - paint stripping tank
to take off paint from the

JK 1/24/92
(59)

GE Bloomington

- conveyor hoods.
alkaline tank sodium hydroxide
solvents
when alkaline material becomes
depleted it goes through water
generates paint sludge waste
-
- Waste Water Treatment Unit (WWTU)
plating and Painting lines.
4 drains
3 streams
- 1) all acid alkaline material
75% of waste stream acid
alkaline
 - 2) Cyanide bearing waste from
silver plating operation
 - 3) hexavalent Chromium rinses
from Chromate conversion coating?
- 3) Chromium waste - pH adjusted to 2
w/ sulfuric acid go to treatment
modular w/ iron filings - hexavalent
Cr reduced to trivalent Cr - then
forms alkaline stream
10,000 gallon tank
- JK (60) 1/24/92

GE. Bloomington

2) Cyanide waste stream - 5,000 gallon tank pH of 8. treatment module where cyanide is destroyed in oxidation process. Sodium Hydroxide and Sodium Hypo Chloride ~~is~~ are used. then this stream joins the alkaline stream.

1) The acid alkaline solution - pH adjusted lowered from 8 to 6
10,000 gallon receiving tank then to a 10,000-gallon tank to adjust pH, the pH is adjusted to 6 and precipitation process starts
pumped into a tank pH finally adjusted to 8.5 precipitation process finished all metals are now metallic hydroxides.
go to flocculation tank - add cationic material binds w/ metallic hydroxides into globules
tank Clarifier - 18,000 gallon tank metallic hydroxides settle to bottom the water is then discharged to

JK 1/24/92
(62)

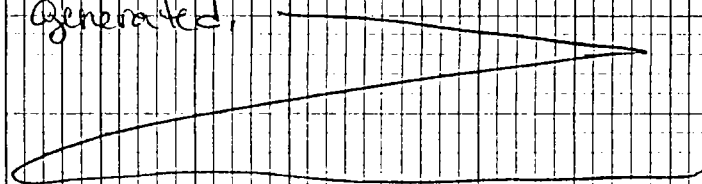
GE. Bloomington

the POTW and mixed with sanitary water. The water is monitored 3 times a week - 24 hour composites. Final discharge.

Monitor water for:

- heavy metals
- cyanide
- BOD
- COD
- Susp Solids
- phenols
- pH

the metallic bottoms are removed 2 to 3 times a week. The sludge is removed and pumped into a holding tank - 5,000 gallons. It is then pumped into a filter press to remove the water the water is discharged into the alkaline streams of the WWTU. The filters are removed by Enwite. the filters are transferred to large roll off boxes. 15 to 20 yards³ are generated.



(62) JK 1/24/92 !!

GE. Bloomington

Construction of receiving tanks

hexavalent tank -

really a concrete pit
lined w/ acid resistant
tile

Cyanide - concrete

acid alkaline - concrete

Cyanide tank - fiberglass

pH - fiberglass

Clarifier - painted steel

rinsing tank - concrete - from
floor rinsings - periodically
empties into acid alkaline

stream - every 4 to 5 mos.

6 floor drains

Chemical storage area for plating
are 2 or 3 drains

There use to be a lab on site. The
plant in Kentucky took over their
work 4 or 5 years ago.

JR 1/24/92
(63)

GE. Bloomington

Molding - thermoset plastic
thermoplastic

thermoset - compression + injection
molding

thermo - injection molding

plastics come in powder form - granules

thermoset - hot cone molding

runner waste - granulated &
accumulated at point
of generation

thermoplastic - runner waste
some recycled
generated & accumulated
at point of generation

Waste taken to -
transported by - Sexton - McLean
Commercial Disposal County Landfill, IL
Bloomington, IL Nonhazardous

dry metals reclaimed -
generation rate 25 yds/yr
2 mos

generation rate 20,000 lbs/yr
1 yr

Diecasting - Al low pressure diecasting
zinc

very little waste - trimmed off
parts are recycled.

product comes in ingots.

JR 1/24/92
(64)

GE Bloomington

Separate barrels for Al & Zn waste
that will be recycled.

Sheet Metal Process -

4 ft x 10 ft sheets → the GE
facility uses a computer that
efficiently uses the whole sheet.
some sheets are pre sheared - no waste
the waste slugs go to recycling
low carbon steel.
bus bars - cut of Cu - segregated &
goes to recycler.

Morris Tick, local recycler of metal scrap

Machine Shop -

coil stock - stamp parts
Strip stock
phosphorous bronze
brass
copper
steel
all waste segregated & taken to
recycler

JL (65) 1/24/92

GE Bloomington

turning centers - bars - steel
brass
copper

any waste taken to recycler
waste oil - generated placed in drums
brought to storage.

(5) Room split - one side haz
other side nonhaz.

Handled by Safety-Kleen
3 areas of cleaning before
machining and plating

1.) Wash - after machining parts
are moved to washer & cleaner
(phosphoric acid soap)

2.) heat treatment - alkaline washer
this is after parts are stamped
or machined & before
heat treatment - sodium carbonate

3.) Vapor degreaser by D. P. Weld
TCA - will be replaced by
aqueous ~~degasser~~ washer

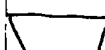
over flow returns to
alkaline stream of the washer

JL (66) 1/24/92

GE Bloomington
Peoria room -
water discharged to WWTU

1 hazardous storage area
(5) present storage began oper mid 1971
less than 90 day storage
15x25

2 Former Storage Areas
above (2) SP-1 inactive ¹⁹⁷¹ used before 1980
40x12

(3) SP-2 inactive 1991
before 1984 started
 30x30

both units are undergoing closure

Now a large quantity generator

May 1991 closure plan approved
June 12, 1991 - should be
closed sometime this year.

TCE spill January of 1991
100 gallons - soil was dug up
50 cubic yards soil removed

JL 1/24/92
(67)

GE Bloomington

by special waste permit to
Peoria Disposal Company - TC
transportation and disposal
~~PE~~ rest of TCE (FeoD) waste
from tank was & disposed of.

incinerator 1972 stopped operating

installed in 1957
incinerated nonhaz solid waste, trash & slud
performed soil sampling around area
TCLP Cd - below KRA
TCLP Pb -

they recommend no further action
waiting for approval

last June sold 20 acres of vacant
property on the east to Country
Companies.

No USB on site

Inactive water tanks aboveground
for fire system

Sugar Creek N of GE facility
NE of facility manmade lake
for fishing.

JL 1/24/92
(68)

GE Bloomington

12:08pm interview ended.

12:20 pm tour started

DP components

- ① East waste Silicon steel from press
- ② North parts washer (North end of building)
- ③ West steel sludge - 90 gallon container
- ④ East Scrap metal - steel solid - 90 gallon cont.
- ⑤ North petroleum naphtha parts washer
- ⑥ East waste coolant tank - the waste is pumped into drum & Safety-Kleen picks it up. 250 gallons
- ⑦ East Scrap metal accumulated & then picked up by local recycler. 100 gallon 5 present
- ⑧ East Spray Can disposal
- ⑨ West Gold Room
- ⑩ (5) North
Secondary containment, 2 inch berm
Hazardous waste stored on right
32 drums 15 X 20 stored closed
waste towels & naphtha
aerosol can disposal
Paint waste

1/24/92
69

GE Bloomington

- ⑪ North
Non hazardous Storage left
10 X 20 10 closed drums
Waste oil
Washer Sludge

Floor is Ceramic tile over cement
Floor drains are plugged

- ⑫ South
Plating room

5	4	3	2	1
8	6	8	8	8
all				

100 to 600
lines

trench around lines - drains under
tanks that go to WWTU
presence of trench & grating
secondary containment trenches

- ⑬ North TCA Vapor degasser
- ⑭ Southeast Cyanide destroyer

1	ALKALINE
2	CN
3	Cyanide

- ⑮ East
filler press hoppers w/ discharge
100 gallon steel dumpsters
- ⑯ Southwest
floor drain where monitoring is
trench

1/24/92
70

GE Bloomington

(17) West Sludge holding tank

(18) Blue unit Cyanide holding tank
West Water wash of print

(19) East
gloves + nonreturnable rags
wash polyurethane in one 55 gallon
from powder coating booth.

(20) North
drain to WWTL in Paint Room
area where heels are cleaned
liquid put directly into drain
sludge put into a barrel and
shipped to Hazardous Waste Storage
once every 4 to 5 mos. curbside contain.

(21) East
Scrap plastic

(22) Northwest ~~popover~~ ^{unit} -
Aqueous Washer
will send discharge to WWTL

(23) Outside 2:05 pm

JO 1/2/92
(71)

GE Bloomington

Clear
Sunny
25°F
Calm

(23) Northeast
Sanitary sewer

(24) Northeast
~~at 70~~ TCE spill soil + concrete
from spill

(25) East
Former Haz. waste Storage SP2

(26) North Hazard Waste Storage SP1

(27) West TCE spill area

(28) East area east of
Haz waste Storage area

(29) East former incinerator site

(30) East
2 empty tanks
left + water right fuel oil

South entrance to plant gate locked
inside 2:25 pm

JO (72) 1/24/92

EE Bloomington

Printing Press operation
when the rollers on the press
are cleaned some waste
rags are generated.
they are put into the rag stream
to be disposed of.

Tour ended 2:30 pm.

Exit interview

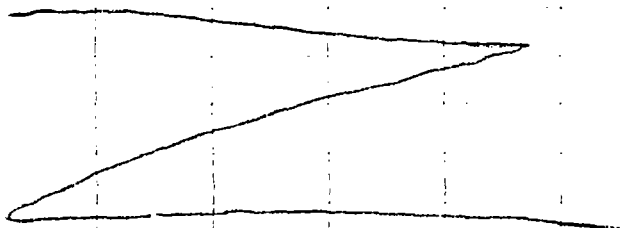
Contact:

Mark Sasel

(301) 664-1445

of EE if I have questions

A storm sewer is located by
the haz. waste storage area inactive
15 parts degreaser in facility.



ye 1/24/92
(73)

ATTACHMENT D

SOIL SAMPLING RESULTS FOR SWMUs 5, 6, AND 7



GENERAL ELECTRIC COMPANY

**DATA COMPILATION AND REVIEW REPORT
HAZARDOUS WASTE STORAGE
FACILITIES**

**LPC No. 1130200016, McClean County
Bloomington, Illinois**

HARZA

ENVIRONMENTAL SERVICES, INC. *Consulting Engineers*

December 1991

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5. Summary of Semi-Volatile Organic Analyses, Storage Pad SP-1
6. Summary of TCLP Metals, Reactivity and Corrosivity Analyses, Storage Pad SP-1
7. Summary of Volatile Organic Analyses, Former Incinerator
8. Summary of TCLP Metals, Reactivity and Corrosivity Analyses, Former Incinerator

FIGURES

1. Site Location Map
2. Storage Pad No. 2, Sample Location Map (includes Former Incinerator Area)
3. Storage Pad No. 1, Sample Location Map

1.0 INTRODUCTION AND BACKGROUND

This report presents results of soil sampling conducted in October 1991 at the General Electric (GE) plant in Bloomington, Illinois. The sampling addressed two former hazardous waste storage pads and a former solid waste incinerator area. Sampling was conducted by Harza Environmental Services, Inc. (Harza) in accordance with the Revised Closure Plan of May 1, 1991. The Revised Closure Plan was submitted to the Illinois Environmental Protection Agency (IEPA) by Eldredge Engineering Associates, Inc. (EEA), and was approved with conditions by IEPA letter dated June 12, 1991.

The GE plant is located at 1601 GE Road, Bloomington, McClean County, Illinois (Figure 1). The property was acquired by GE in the 1950s and is operated by its Electrical Distribution and Control Division for the manufacture of electrical controls such as motor starters, solenoids and relays. Additional information on site conditions and history is provided in the Revised Closure Plan.

The storage pads and former incinerator area are located on the east side of the manufacturing building. Storage Pad 2 (SP-2) was used from about 1981 until recently as an interim status RCRA storage unit for hazardous wastes generated on-site (Figure 2). Wastes were removed by GE prior to soil sampling. Storage Pad 1 (SP-1) formerly was used for storage of hazardous wastes (Figure 3). Such use may have postdated promulgation of RCRA and, therefore, closure of this facility also is being required. However, no hazardous wastes have been stored at this location for many years. The solid waste incinerator was used well before 1980, apparently for burning non-hazardous plant trash. The incinerator is not thought to be a regulated facility under RCRA and no longer exists. The sampling was included to facilitate the overall program.

The purpose of sampling at the two storage pads was to verify sampling conducted by Environmental Assessment Services, Inc. (EAS) submitted previously to IEPA, and to determine the presence, if any, of soil contamination exceeding soil cleanup objectives. Soil cleanup objectives for this site were established by IEPA letter to GE dated October 26, 1990. Results will be used to identify requirements for final closure of the facilities. Sampling objectives at the former solid waste incinerator were to evaluate impacts on site soils, if any, due to prior use of the incinerator.

A chronological summary of reports and closure activities leading up to submission of the Revised Closure Plan was included in the Plan. The following updates that chronology:

January 29, 1990	Closure Plan prepared by Environmental Assessment Services, Inc. (EAS) submitted to IEPA for active hazardous waste storage area (SP-2).
April 27, 1990	IEPA letter to GE approves EAS Closure Plan with 18 conditions attached. The former hazardous waste storage area (SP-1) was required to be included.
June 1990	Closure Plan revised by EAS including both SP-1 and SP-2 and submitted to IEPA. Additional waste stream information was provided to IEPA.
June 19 to 21, 1990	EAS conducts sampling proposed in the June 1990 Closure Plan, but not yet approved by IEPA. Program included collection and analysis of 66 samples.
July 1990	EAS summary of analytical results submitted to IEPA.
September 12, 1990	IEPA letter approves revised (June 1990) Closure Plan with 16 conditions attached.
October 26, 1990	IEPA letter to GE acknowledges receipt of EAS sampling data, indicates that sampling protocol was incorrect and requests a revised Closure Plan. Eleven conditions are attached. Soil cleanup objectives were established.
March 25, 1991	Eldredge Engineering Associates, Inc. (EEA) letter to IEPA requests extension until May 1, 1991 to submit revised Closure Plan. Extension request verbally accepted by IEPA.
May 1, 1991	Revised Closure Plan submitted to IEPA by EEA.
June 12, 1991	IEPA letter approves Revised Closure Plan with 13 conditions attached.
October 30 and 31, 1991	Harza implements revised sampling and analyses plan including collection and analysis of 26 samples at 13 locations.
December 30, 1991	Harza submits results of sampling and analysis (herein).

2.0 SAMPLING AND ANALYSIS

Soil samples were collected from thirteen (13) locations during this program, five (SP1-1 through SP1-5) from storage pad SP-1, six (SP2-1 through SP2-6) from SP2, and two (FI1 and FI2) from the former incinerator area. Samples were collected in shallow borings drilled through any concrete pavement and fill and into native soils. Locations are shown on Figure 2 for the SP-2 pad and former incinerator and Figure 3 for the SP-1 pad. Analytical data are provided in Appendix A and summarized in Section 2.3. Selected photographs taken during the sampling are provided in Appendix B.

2.1 Sampling Methods

Concrete coring and soil borings were performed by Testing Service Corporation (TSC) of Carol Stream, Illinois, monitored by Harza. Soil samples were screened by Harza using an HNU PI-101 photoionization detector, which measures total organic vapors. The HNU was fitted with an 11.7 eV lamp and was calibrated daily to a benzene equivalent. No HNU readings above background (zero) were detected.

Soil samples were collected by Harza in two basic depth intervals below the top of native soil: 0 to 6 inches and 18 to 24 inches. This depth interval was specified in the IEPA letter dated June 12, 1991. All sample depths were measured from the top of the native soil surface below the concrete pad, except for SP2-6, FI-1 and FI-2, which were located on grassy areas. For these locations, soil samples were collected at depths of 6 to 12 inches and 18 to 24 inches as required by IEPA's letter. Due to poor sample recovery and difficulties encountered in advancing the sampler, the depth of two of the deeper samples (SP1-1-2 and SP1-5-2) was adjusted slightly to the 24 to 30 inch depth interval.

Sample designations consist of the feature designation (i.e. SP1, SP2 or FI), location number (i.e. "1", "2", etc.), and sample depth ("1" indicates the shallower sample and "2" the deeper sample at each location). For example, sample SP1-1-2 was collected from Storage Pad 1, location 1 at the 18 to 24 inch depth interval.

A five-inch diameter, diamond-tipped core barrel was used to core through the concrete pad and gain access to the underlying subbase and soil materials. The shallower soil samples were then collected by pushing a precleaned, ten-inch long, stainless steel, thin-walled tube (Shelby Tube), six inches into the soil. After collection of this sample, the hole was advanced to a depth of 18 inches and a second ten-inch tube was pushed to collect the deeper sample. After completion of sampling, the holes were backfilled with pea gravel and patched with concrete in pad areas.

Three locations, SP1-3, SP1-4 and SP1-5, were located under a canopy which precluded drill rig access. For these, the hole was advanced using a stainless steel bucket hand auger. At two locations, SP1-1 and SP2-3, insufficient sample quantity was obtained from the original hole to perform required analyses. Therefore, at these locations a new hole was drilled immediately adjacent to the original, and the required sample quantities were obtained at appropriate depths. Sample SP1-1-1 was obtained from the original hole (SP1-1), and SP1-1-2 from the redrilled hole (SP1-1A). Sample SP2-3-1 was obtained from the redrilled hole (SP2-3A), and SP2-3-2 was obtained from the original hole (SP2-3). These samples were collected as part of the same sampling event and utilized the same sampling procedures.

Upon extraction of the tubes from the soil, additional clean clay was added to the *headspace portions at each end*. *The tube then was capped and stored in a chilled cooler*. The samples were delivered to the laboratory via overnight courier. The stainless steel Shelby Tubes had been precleaned in accordance with Attachment 1 of IEPA's "Instructions for the Preparation of Closure Plans for Interim Status RCRA Hazardous Waste Facilities." The sequence for cleaning the tubes was:

1. Wash with hot water and non-foaming detergent.
2. Rinse with hot water.
3. Rinse with methanol, recommended by the laboratory.
4. Rinse with hot water.
5. Rinse with deionized water.

The tubes then were wrapped in aluminum foil until needed.

Two rinsate blanks were collected by pouring deionized water over the precleaned tubes and collecting the rinsate in sample bottles. Two trip blanks also were prepared, consisting of deionized water poured into sample containers by the laboratory and shipped to Harza with the other containers. The trip blanks were present at the site during sampling and were shipped to the laboratory with the samples.

2.2 Analytical Parameters and Methods

Laboratory analyses were performed by Applied Research and Development Laboratory (ARDL), of Mt. Vernon, Illinois. ARDL is a member of the IEPA Contract Laboratory Program. Analytical parameters and methods were in accordance with the Work Plan, as approved by IEPA. Parameters and SW-846 methods used were:

Volatile Organics	Method 8240
Semi-Volatile Organics	Method 8270
TCLP Metals	Method 1311
Corrosivity	Method 9045
Reactive Cyanide	Section 7.3.3.2

All soil samples were analyzed for volatile organics, TCLP metals, corrosivity (soil pH), and reactive cyanide. Semi-volatile analyses were obtained for the upper sample from each location at the SP-1 and SP-2 storage pad areas. Semi-volatile analyses were not required for the deeper samples or for the former incinerator area, in accordance with IEPA's June 12, 1991 approval letter. The field rinsate blanks were analyzed for VOCs and nine metals (arsenic, barium, cadmium, chromium, lead, mercury, nickel, selenium and silver). The trip blanks were analyzed for VOCs. Additional information on analytical protocols and Quality Control results are provided in the Case Narratives included in Appendix A.

2.3 Summary of Results

Results of analyses are summarized in the following sections with reference to Tables 1 through 8, Figures 2 and 3, and Appendix A. Results are compared to Class II Soil Objectives, where available, listed in IEPA's letter to GE dated October 26, 1990. Where applicable, comparisons also are made to proposed RCRA Corrective Action levels as provided in USEPA's Proposed Rule "Corrective Action for Solid Waste Management Units (SWMUs) at Hazardous Waste Management Facilities" (EPA/SW-530-90-012, July 1990). Results of analyses for reactive cyanide and corrosivity are included in the tables and Appendix A, but are not summarized in the text because they apply to possible disposal requirements. Selected site photographs are included in Appendix B.

2.3.1 Storage Pad SP-2

Results of VOC analysis from SP-2 are summarized in Table 1. No VOCs were detected above IEPA's Class II Soil Objectives. Only acetone and xylene, near the Contract Required Detection Limit (CRDL) and well below soil objectives, were positively identified in any sample. Acetone also was detected in the blank sample.

Results of semi-volatile analysis from SP-2 are summarized in Table 2. No site soil objectives are available for these parameters. The only semi-volatiles positively identified were bis(2-ethylhexyl)phthalate in each sample and the blank, 2-

methylphenol and 4-methylphenol below the CRDL in SP2-6-1, and 4-chloro-3-methylphenol below the CRDL in SP2-2-1. Bis(2-ethylhexyl)phthalate concentrations were also below the CRDL in all but one sample.

Table 3 summarizes results of TCLP metals analysis from SP-2. Only TCLP cadmium was found to exceed available IEPA soil objectives and was detected in all samples except SP2-4-1 and SP2-6-2. Where detected, concentrations exceeded IEPA's soil objective of 0.05 mg/L except at SP2-4-2. Several results (SP2-1-1, SP2-2-1, SP2-2-2, SP2-5-1 and SP2-5.2) also exceeded the RCRA characteristic regulatory level of 1.0 mg/L. No other TCLP metals were found to exceed available soil objectives and arsenic, nickel and selenium were not detected in any sample.

2.3.2 Storage Pad SP-1

Results of VOC analyses from SP-1 are summarized in Table 4. Only trichloroethene (TCE) exceeded available site soil objectives and few other VOCs were detected in any sample. TCE occurrences were limited to the south half of the SP-1 pad and concentrations, ranging between 25 and 120 ug/kg, increased toward the south. All results were well below the proposed RCRA Action Level of 60,000 ug/kg.

Results of semi-volatile organic analyses from SP-1 are summarized in Table 5. No soil objectives are available for semi-volatiles. Bis(2-ethylhexyl)phthalate was found near or below the CRDL in each sample and in the blank. The only other semi-volatiles positively identified were fluoranthene and pyrene in SP1-1-1, both below the CRDL.

Table 6 summarizes results of TCLP metals analysis from SP-1. No TCLP metals were found to exceed available soil objectives and no arsenic, chromium, lead, nickel or selenium were detected in any sample.

2.3.3 Former Incinerator

Results of VOC analyses from the former incinerator area are summarized in Table 7. No VOCs were detected above available soil objectives. Only acetone, toluene and trichloroethene were positively identified in any sample, all well below their respective soil objectives and at or below the CRDL. Acetone also was found in the blank.

Table 8 summarizes results of TCLP metals analysis from the former incinerator. Only TCLP cadmium at location FI-2 and lead in sample FI-2-1 were found to slightly exceed available soil objectives.

3.0 SUMMARY AND CONCLUSIONS

3.1 Storage Pad SP-2

TCLP cadmium is the only parameter found to exceed available IEPA soil objectives at the SP-2 Storage Pad. No other organic or TCLP parameters were found to exceed soil objectives established for the site by IEPA and no semi-volatiles above the CRDL were confirmed.

The six-inch thick concrete pavement presently covering the SP-2 area minimizes direct contact with the affected soils, while inhalation is not an exposure route of concern for cadmium. Access to the site is controlled by plant security and fencing and the site is used only for activities directly related to GE manufacturing operations (i.e. truck deliveries, equipment storage, parking, maintenance, etc.). The concrete pavement also reduces the quantity of precipitation which might infiltrate into the affected soils, thereby reducing the likelihood that cadmium will migrate beyond the immediate pad area or to groundwater. Due to their low hydraulic conductivity and tendency to adsorb metallic ions, the dense, clayey till soils underlying the pavement further reduce the rate at which precipitation can infiltrate through the affected soils and, therefore, the likelihood that cadmium will migrate. Cadmium also is relatively insoluble in water at normal pH levels. Groundwater itself is not indicated to be an issue because the clay tills immediately underlying the site contain little free groundwater and are not suitable for water supply development due to low yields. Test pits and borings, completed for unrelated purposes to the east, encountered only clay soils containing little groundwater to the maximum excavated or drilled depth of 31 feet.

Based on these site conditions, cadmium in soils at SP-2 is suggested to offer little exposure and, therefore, risk to human health and minimal potential for migration and adverse environmental impacts. Closure of SP-2 as a RCRA hazardous waste storage facility could be achieved by leaving the affected soils in place and maintaining the existing concrete pavement as a cap. The effectiveness of the pavement as a cap would be enhanced by sealing the surface, including any cracks, and further promoting surface water runoff by breaching the existing curbing. Controls also should be implemented to assure future maintenance of the pavement and preclude disturbance or alternative use.

3.2 Storage Pad SP-1

TCE is the only parameter of apparent concern at the SP-1 storage pad. TCE was not detected in the north part of the pad, but exceeded IEPA's soil objective in the south

part of the area, increasing in concentration toward the south. The maximum concentration (120 ug/kg) remained well below USEPA's proposed RCRA Corrective Action Level for soil (60,000 ug/kg) and no other soil objectives were exceeded.

The pattern of TCE occurrence at SP-1 indicates that the contamination is not related to use of the storage pad itself, which ceased by the early 1980s, but is due to a more recent release from an adjacent TCE tank area to the southwest. Although no longer active and not part of this RCRA closure, the TCE tank area is the subject of ongoing assessment and remedial efforts reported separately to IEPA (Emergency Response Unit, Office of Chemical Safety, Incident 910226). To date, these efforts have included soil sampling and screening, removal of the TCE tank, removal of concrete paving, and disposal of about 50 cubic yards of contaminated soil. This effort is incomplete and the extent of contamination is not fully known. However, available data indicate it extends toward the SP-1 pad and plans for further assessment are being developed.

The sampling results indicate no soil contamination apparently attributable to past or present use of the SP-1 storage pad. From this perspective, therefore, no further actions appear necessary for its closure as a RCRA hazardous waste storage facility. However, contamination beneath the TCE tank area will have to be addressed, including the south half of the SP-1 pad, as appropriate. This can be accomplished effectively only as an integrated program which appears separate from the SP-1 closure. Plans for further investigation leading to remediation of the TCE tank area are being developed and will be submitted to the Emergency Response Unit of the IEPA.

3.3 Former Incinerator

No hazardous wastes are known to have been burned in the former incinerator and, therefore, it is not thought to be a RCRA facility. Sampling was included only as a cost-effective means of evaluation. However, IEPA soil objectives applied to the RCRA closures at SP-1 and SP-2 provide useful comparative values. TCLP cadmium in both samples and lead in the deeper sample at location FI-2 are the only parameters indicated to exceed the soil objectives. Each is well below RCRA characteristic regulatory levels and no other TCLP metals or organics are indicated to be of concern. Based on these results, past operation of the incinerator does not appear to have had significant adverse impact on the environment and currently poses little risk to human health. The incinerator has been removed and further actions appear unnecessary.

TABLES

SUPPLEMENTAL NOTES TO TABLES

- "J" Indicates an estimated value. This flag is used either when estimating a concentration for TICs where a 1:1 response is assumed or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the CRDL.
- "B" This flag is used when the analyte is found in the blank as well as the sample. This flag must be used for a TIC as well as for a positively identified TCL compound.
- "<" Indicates parameter not detected at the concentration shown.
- "**" Indicates unknown compounds detected in sample. See Appendix A.
- NA Not available.

TABLE 1 (Page 1 of 2)
Summary of Volatile Organic Analyses, Storage Pad SP-2
General Electric Company, Bloomington, Illinois

Parameter	SP2-1-1*	SP2-1-2*	SP2-2-1*	Sample Number ¹		SP2-3-2*	SP2-3-2RE*	IEPA Site Objectives	Units
				SP2-2-2*	SP2-3-1*				
Acetone	13 B	13 B	19 B	35 B	7 JB	<12	<12	700	ug/Kg
Benzene	<6	<6	<6	<6	<6	<6	<6	NA	ug/Kg
Bromodichloromethane	<6	<6	<6	<6	<6	<6	<6	NA	ug/Kg
Bromoform	<6	<6	<6	<6	<6	<6	<6	NA	ug/Kg
Bromomethane	<12	<12	<12	<11	<13	<12	<12	NA	ug/Kg
2-Butanone	<12	<12	<12	<11	<13	<12	<12	NA	ug/Kg
Carbon Disulfide	<6	<6	<6	<6	<6	<6	<6	NA	ug/Kg
Carbon Tetrachloride	<6	<6	<6	<6	<6	<6	<6	NA	ug/Kg
Chlorobenzene	<6	<6	<6	<6	<6	<6	<6	NA	ug/Kg
Chloroethane	<12	<12	<12	<11	<13	<12	<12	NA	ug/Kg
Chloroform	<6	<6	<6	<6	<6	<6	<6	NA	ug/Kg
Chloromethane	<12	<12	<12	<11	<13	<12	<12	NA	ug/Kg
Methylene Chloride	<6	<6	<6	<6	<6	<6	<6	25	ug/Kg
Dibromochloromethane	<6	<6	<6	<6	<6	<6	<6	NA	ug/Kg
1,1-Dichloroethane	<6	<6	<6	<6	<6	<6	<6	NA	ug/Kg
1,2-Dichloroethane	<6	<6	<6	<6	<6	<6	<6	1,000	ug/Kg
1,1-Dichloroethene	<6	<6	<6	<6	<6	<6	<6	35	ug/Kg
1,2-Dichloroethene (total)	<6	<6	<6	<6	<6	<6	<6	700	ug/Kg
1,1,1-Trichloroethane	<6	<6	<6	<6	<6	<6	<6	NA	ug/Kg
1,1,2-Trichloroethane	<6	<6	<6	<6	<6	<6	<6	NA	ug/Kg
1,2-Dichloropropane	<6	<6	<6	<6	<6	<6	<6	NA	ug/Kg
cis-1,3-Dichloropropane	<6	<6	<6	<6	<6	<6	<6	NA	ug/Kg
trans-1,3-Dichloropropane	<6	<6	<6	<6	<6	<6	<6	NA	ug/Kg
Ethylbenzene	<6	<6	<6	<6	<6	<6	<6	1,000	ug/Kg
2-Hexanone	<12	<12	<12	<11	<13	<12	<12	NA	ug/Kg
4-Methyl-2-Pentanone	<12	<12	<12	<11	<13	<12	<12	NA	ug/Kg
Styrene	<6	<6	<6	<6	<6	<6	<6	NA	ug/Kg
Tetrachloroethene	<6	<6	<6	<6	<6	<6	<6	NA	ug/Kg
1,1,2,2-Tetrachloroethane	<6	<6	<6	<6	<6	<6	<6	NA	ug/Kg
Toluene	<6	<6	<6	<6	<6	<6	<6	5,000	ug/Kg
Trichloroethene	<6	<6	<6	<6	<6	<6	<6	25	ug/Kg
Vinyl Acetate	<12	<12	<12	<11	<13	<12	<12	ND	ug/Kg
Vinyl Chloride	<12	<12	<12	<11	<13	<12	<12	10	ug/Kg
Xylene (total)	<6	<6	<6	6	<6	<6	<6	10,000	ug/Kg
Ethylmethylbenzene ²	-	-	-	33	-	-	-	NA	ug/Kg

TABLE 1 (Page 2 of 2)
Summary of Volatile Organic Analyses, Storage Pad SP-2
General Electric Company, Bloomington, Illinois

Parameter	Sample Number ¹						IEPA Site Objective	Units
	SP2-4-1 *	SP2-4-2	SP2-5-1	SP2-5-2	SP2-6-1 *	SP2-6-2 *		
Acetone	< 12	14 B	9 JB	12	17 B	16 B	700	ug/Kg
Benzene	< 6	< 6	< 6	< 6	< 6	< 7	NA	ug/Kg
Bromodichloromethane	< 6	< 6	< 6	< 6	< 6	< 7	NA	ug/Kg
Bromoform	< 6	< 6	< 6	< 6	< 6	< 7	NA	ug/Kg
Bromomethane	< 12	< 12	< 12	< 11	< 13	< 14	NA	ug/Kg
2-Butanone	< 12	< 12	< 12	< 11	< 13	< 14	NA	ug/Kg
Carbon Disulfide	< 6	< 6	< 6	< 6	< 6	< 7	NA	ug/Kg
Carbon Tetrachloride	< 6	< 6	< 6	< 6	< 6	< 7	NA	ug/Kg
Chlorobenzene	< 6	< 6	< 6	< 6	< 6	< 7	NA	ug/Kg
Chloroethane	< 12	< 12	< 12	< 11	< 13	< 14	NA	ug/Kg
Chloroform	< 6	< 6	< 6	< 6	< 6	< 7	NA	ug/Kg
Chloromethane	< 12	< 12	< 12	< 11	< 13	< 14	NA	ug/Kg
Methylene Chloride	< 6	< 6	< 6	< 6	< 6	< 7	25	ug/Kg
Dibromochloromethane	< 6	< 6	< 6	< 6	< 6	< 7	NA	ug/Kg
1,1-Dichloroethane	< 6	< 6	< 6	< 6	< 6	< 7	NA	ug/Kg
1,2-Dichloroethane	< 6	< 6	< 6	< 6	< 6	< 7	1,000	ug/Kg
1,1-Dichloroethene	< 6	< 6	< 6	< 6	< 6	< 7	35	ug/Kg
1,2-Dichloroethene (total)	< 6	< 6	< 6	< 6	< 6	< 7	700	ug/Kg
1,1,1-Trichloroethane	< 6	< 6	< 6	< 6	< 6	< 7	NA	ug/Kg
1,1,2-Trichloroethane	< 6	< 6	< 6	< 6	< 6	< 7	NA	ug/Kg
1,2-Dichloropropane	< 6	< 6	< 6	< 6	< 6	< 7	NA	ug/Kg
cis-1,3-Dichloropropane	< 6	< 6	< 6	< 6	< 6	< 7	NA	ug/Kg
trans-1,3-Dichloropropane	< 6	< 6	< 6	< 6	< 6	< 7	NA	ug/Kg
Ethylbenzene	< 6	< 6	< 6	< 6	< 6	< 7	1,000	ug/Kg
2-Hexanone	< 12	< 12	< 12	< 11	< 13	< 14	NA	ug/Kg
4-Methyl-2-Pentanone	< 12	< 12	< 12	< 12	< 13	< 14	NA	ug/Kg
Styrene	< 6	< 6	< 6	< 6	< 6	< 7	NA	ug/Kg
Tetrachloroethene	< 6	< 6	< 6	< 6	< 6	< 7	NA	ug/Kg
1,1,2,2-Tetrachloroethane	< 6	< 6	< 6	< 6	< 6	< 7	NA	ug/Kg
Toluene	< 6	< 6	< 6	< 6	< 6	< 7	5,000	ug/Kg
Trichloroethene	< 6	< 6	< 6	< 6	< 6	< 7	25	ug/Kg
Vinyl Acetate	< 12	< 12	< 12	< 11	< 13	< 14	ND	ug/Kg
Vinyl Chloride	< 12	< 12	< 12	< 11	< 13	< 14	10	ug/Kg
Xylene (total)	< 6	< 6	< 6	< 6	< 6	< 7	10,000	ug/Kg
1,1,2-Trichloro-1,2,2-trifluoroethane ²	-	13	-	11	-	12	NA	ug/Kg

NOTES: 1. See Figure 2 for sample locations and Appendix A for laboratory reports. See attached Supplemental Notes.

2. Tentatively identified compound (TIC). Concentration estimated.

3. Sample SP2-3-2 reanalyzed by laboratory (SP2-3-2RE). See Appendix A.

TABLE 2 (Page 1 of 2)
Summary of Semi-Volatile Organic Analyses, Storage Pad SP-2
General Electric Company, Bloomington, Illinois

Parameter	Sample Number ¹						Units
	SP2-1-1	SP2-2-1	SP2-3-1	SP2-4-1	SP2-5-1	SP2-6-1	
Phenol	<390	<400	<430	<380	<400	<420	ug/Kg
bis(2-Chloroethyl)ether	<390	<400	<430	<380	<400	<420	ug/Kg
2-Chlorophenol	<390	<400	<430	<380	<400	<420	ug/Kg
1,3-Dichlorobenzene	<390	<400	<430	<380	<400	<420	ug/Kg
1,4-Dichlorobenzene	<390	<400	<430	<380	<400	<420	ug/Kg
Benzyl alcohol	<390	<400	<430	<380	<400	<420	ug/Kg
1,2-Dichlorobenzene	<390	<400	<430	<380	<400	<420	ug/Kg
2-Methylphenol	<390	<400	<430	<380	<400	390 J	ug/Kg
bis(2-chloroisopropyl)ether	<390	<400	<430	<380	<400	<420	ug/Kg
4-Methylphenol	<390	<400	<430	<380	<400	290 J	ug/Kg
N-Nitroso-Di-n-propylamine	<390	<400	<430	<380	<400	<420	ug/Kg
Hexachloroethane	<390	<400	<430	<380	<400	<420	ug/Kg
Nitrobenzene	<390	<400	<430	<380	<400	<420	ug/Kg
Isophorone	<390	<400	<430	<380	<400	<420	ug/Kg
2-Nitrophenol	<390	<400	<430	<380	<400	<420	ug/Kg
2,4-Dimethylphenol	<390	<400	<430	<380	<400	<420	ug/Kg
Benzoic acid	<1,900	<1,900	<2,100	<1,900	<2,000	<2,000	ug/Kg
bis(2-Chloroethoxy)methane	<390	<400	<430	<380	<400	<420	ug/Kg
2,4-Dichlorophenol	<390	<400	<430	<380	<400	<420	ug/Kg
1,2,4-Trichlorobenzene	<390	<400	<430	<380	<400	<420	ug/Kg
Naphthalene	<390	<400	<430	<380	<400	<420	ug/Kg
4-Chloroaniline	<390	<400	<430	<380	<400	<420	ug/Kg
4-Hexachlorobutadiene	<390	<400	<430	<380	<400	<420	ug/Kg
4-Chloro-3-methylphenol	<390	380 J	<430	<380	<400	<420	ug/Kg
2-Methylnaphthalene	<390	<400	<430	<380	<400	<420	ug/Kg
Hexachlorocyclopentadiene	<390	<400	<430	<380	<400	<420	ug/Kg
2,4,6-Trichlorophenol	<390	<400	<430	<380	<400	<420	ug/Kg
2,4,5-Trichlorophenol	<1,900	<1,900	<2,100	<1,900	<2,000	<2,000	ug/Kg
2-Chloronaphthalene	<390	<400	<430	<380	<400	<420	ug/Kg
2-Nitroaniline	<1,900	<1,900	<2,100	<1,900	<2,000	<2,000	ug/Kg
Dimethylphthalate	<390	<400	<430	<380	<400	<420	ug/Kg
Acenaphthylene	<390	<400	<430	<380	<400	<420	ug/Kg
2,6-Dinitrotoluene	<390	<400	<430	<380	<400	<420	ug/Kg
3-Nitroaniline	<1,900	<1,900	<2,100	<1,900	<2,000	<2,000	ug/Kg
Acenaphthene	<390	<400	<430	<380	<400	<420	ug/Kg
2,4-Dinitrophenol	<1,900	<1,900	<2,100	<1,900	<2,000	<2,000	ug/Kg
4-Nitrophenol	<1,900	<1,900	<2,100	<1,900	<2,000	<2,000	ug/Kg

TABLE 2 (Page 2 of 2)
Summary of Semi-Volatile Organic Analyses, Storage Pad SP-2
General Electric Company, Bloomington, Illinois

Parameter	Sample Number ¹						Units
	SP2-1-1	SP2-2-1	SP2-3-1	SP2-4-1	SP2-5-1	SP2-6-1	
Dibenzofuran	<390	<400	<430	<380	<400	<420	ug/Kg
2,4-Dinitrotoluene	<390	<400	<430	<380	<400	<420	ug/Kg
Diethylphthalate	<390	<400	<430	<380	<400	<420	ug/Kg
4-Chlorophenyl-phenylether	<390	<400	<430	<380	<400	<420	ug/Kg
Fluorene	<390	<400	<430	<380	<400	<420	ug/Kg
4-Nitroaniline	<1,900	<1,900	<2,100	<1,900	<2,000	<2,000	ug/Kg
4,6-Dinitro-2-methylphenol	<1,900	<1,900	<2,100	<1,900	<2,000	<2,000	ug/Kg
N-Nitrosodiphenylamine	<390	<400	<430	<380	<400	<420	ug/Kg
4-Bromophenyl-phenylether	<390	<400	<430	<380	<400	<420	ug/Kg
Hexachlorobenzene	<390	<400	<430	<380	<400	<420	ug/Kg
Pentachlorophenol	<1,900	<1,900	<2,100	<1,900	<2,000	<2,000	ug/Kg
Phenanthrene	<390	<400	<430	<380	<400	<420	ug/Kg
Anthracene	<390	<400	<430	<380	<400	<420	ug/Kg
Di-n-butylphthalate	<390	<400	<430	<380	<400	<420	ug/Kg
Fluoranthene	<390	<400	<430	<380	<400	<420	ug/Kg
Pyrene	<390	<400	<430	<380	<400	<420	ug/Kg
Butylbenzylphthalate	<390	<400	<430	<380	<400	<420	ug/Kg
3,3-Dichlorobenzidine	<780	<800	<860	<770	<800	<850	ug/Kg
Benzo(a)anthracene	<390	<400	<430	<380	<400	<420	ug/Kg
Chrysene	<390	<400	<430	<380	<400	<420	ug/Kg
bis(2-Ethylhexyl)phthalate	370 JB	500 B	470 B	370 JB	510 B	1,600 B	ug/Kg
Di-n-Octyl Phthalate	<390	<400	<430	<380	<400	<420	ug/Kg
Benzo(b)fluoranthene	<390	<400	<430	<380	<400	<420	ug/Kg
Benzo(k)fluoranthene	<390	<400	<430	<380	<400	<420	ug/Kg
Benzo(a)pyrene	<390	<400	<430	<380	<400	<420	ug/Kg
Indeno(1,2,3-cd)pyrene	<390	<400	<430	<380	<400	<420	ug/Kg
Dibenzo(a,h)anthracene	<390	<400	<430	<380	<400	<420	ug/Kg
Benzo(g,h,i)perylene	<390	<400	<430	<380	<400	<420	ug/Kg
Ethylmethylbenzene ²	-	130-180	-	-	-	-	ug/Kg

NOTES: 1. See Figure 2 for sample locations and Appendix A for laboratory reports. See attached Supplemental Notes.

2. Tentatively identified compound (TIC). Concentration estimated.

3. Unknown compounds detected in all samples. See Appendix A.

TABLE 3
Summary of TCLP Metals, Reactivity and Corrosivity Analyses, Storage Pad SP-2
General Electric Company, Bloomington, Illinois

Parameter	Sample Number ¹												IEPA Site	Units
	SP2-1-1	SP2-1-2	SP2-2-1	SP2-2-2	SP2-3-1	SP2-3-2	SP2-4-1	SP2-4-2	SP2-5-1	SP2-5-2	SP2-6-1	SP2-6-2	Objective	
Arsenic	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	NA	mg/L
Barium	1.4	1.1	1.4	0.76	1.1	1.0	1.2	1.3	1.8	1.1	1.3	0.98	5.0	mg/L
Cadmium	4.8	0.29	4.9	3.8	0.091	0.83	<0.005	0.014	1.4	1.3	0.32	<0.005	0.05	mg/L
Chromium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.10	<0.01	1.0	mg/L
Lead	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.002	<0.002	<0.002	<0.002	0.1	mg/L
Mercury	<0.0002	0.00061	<0.0002	0.00023	<0.0002	<0.0002	<0.0002	0.0013	<0.0002	<0.002	<0.0002	0.0012	2.0	mg/L
Nickel	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	2.0	mg/L
Selenium	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	NA	mg/L
Silver	<0.01	0.017	<0.01	0.017	<0.01	0.018	<0.01	0.016	<0.01	0.026	<0.01	0.032	NA	mg/L
Reactive Cyanide	1.5	<0.35	1.4	<0.33	0.24	<0.31	0.48	<0.37	<0.30	<0.25	<0.28	<0.43	NA	mg/kg
Corrosivity	7.6	8.2	8.6	9.0	6.8	7.7	7.6	7.8	7.8	8.6	6.7	6.7	NA	pH Units

NOTES: 1. See Figure 2 for sample locations and Appendix A for laboratory reports. See Supplemental Notes.

TABLE 4 (Page 1 of 2)
Summary of Volatile Organic Analyses, Storage Pad SP-1
General Electric Company, Bloomington, Illinois

Parameter	Sample Number ¹						IEPA Site Objective	Units
	SP1-1-1	SP1-1-2	SP1-2-1 *	SP1-2-2	SP1-3-1	SP1-3-2		
Acetone	15 B	<12	12 JB	14 B	<11	<12	700	ug/Kg
Benzene	<6	<6	<6	<5	<6	<6	NA	ug/Kg
Bromodichloromethane	<6	<6	<6	<5	<6	<6	NA	ug/Kg
Bromoform	<6	<6	<6	<5	<6	<6	NA	ug/Kg
Bromomethane	<11	<12	<12	<10	<11	<12	NA	ug/Kg
2-Butanone	<11	<12	<12	<10	<11	<12	NA	ug/Kg
Carbon Disulfide	<6	<6	<6	<5	<6	<6	NA	ug/Kg
Carbon Tetrachloride	<6	<6	<6	<5	<6	<6	NA	ug/Kg
Chlorobenzene	<6	<6	<6	<5	<6	<6	NA	ug/Kg
Chloroethane	<11	<12	<12	<10	<11	<12	NA	ug/Kg
Chloroform	<6	<6	<6	<5	<6	<6	NA	ug/Kg
Chloromethane	<11	<12	<12	<10	<11	<12	NA	ug/Kg
Dibromochloromethane	<6	<6	<6	<5	<6	<6	NA	ug/Kg
1,1-Dichloroethane	<6	<6	<6	<5	<6	<6	NA	ug/Kg
1,2-Dichloroethane	<6	<6	<6	<5	<6	<6	NA	ug/Kg
1,1-Dichloroethene	<6	<6	<6	<5	<6	<6	35	ug/Kg
1,2-Dichloroethene (total)	<6	<6	<6	<5	<6	<6	700	ug/Kg
1,2-Dichloropropane	<6	<6	<6	<5	<6	<6	NA	ug/Kg
cis-1,3-Dichloropropene	<6	<6	<6	<5	<6	<6	NA	ug/Kg
trans-1,3-Dichloropropene	<6	<6	<6	<5	<6	<6	NA	ug/Kg
Ethylbenzene	<6	<6	<6	<5	<6	<6	1,000	ug/Kg
2-Hexanone	<11	<12	<12	<10	<11	<12	NA	ug/Kg
Methylene Chloride	<6	<6	<6	<5	<6	<6	25	ug/Kg
4-Methyl-2-Pentanone	<11	<12	<12	<10	<11	<12	NA	ug/Kg
Styrene	<6	<6	<6	<5	<6	<6	NA	ug/Kg
1,1,2,2-Tetrachloroethane	<6	<6	<6	<5	<6	<6	NA	ug/Kg
Tetrachloroethene	<6	<6	<6	<5	<6	<6	NA	ug/Kg
Toluene	<6	<6	<6	<5	<6	<6	5,000	ug/Kg
1,1,1-Trichloroethane	<6	<6	<6	<5	<6	<6	1,000	ug/Kg
1,1,2-Trichloroethane	<6	<6	<6	<5	<6	<6	NA	ug/Kg
Trichloroethene	<6	<6	<6	<5	3 J	39	125	ug/Kg
Vinyl Acetate	<11	<12	<12	<10	<11	<12	NA	ug/Kg
Vinyl Chloride	<11	<12	<12	<10	<11	<12	10	ug/Kg
Xylene (total)	<6	<6	<6	<5	<6	<6	10,000	ug/Kg
1,1,2-Trichloro-1,2,2-trifluoroethane ²	7	-	-	8	-	11	NA	ug/Kg

TABLE 4 (Page 2 of 2)
Summary of Volatile Organic Analyses, Storage Pad SP-1
General Electric Company, Bloomington, Illinois

Parameter	Sample Number ¹				IEPA Site Objective	Units
	SP1-4-1	SP1-4-2	SP1-5-1 *	SP1-5-2		
Acetone	12	<12	<12	<12	700	ug/Kg
Benzene	<6	<6	<6	<6	NA	ug/Kg
Bromodichloromethane	<6	<6	<6	<6	NA	ug/Kg
Bromoform	<6	<6	<6	<6	NA	ug/Kg
Bromomethane	<11	<12	<12	<12	NA	ug/Kg
2-Butanone	<11	<12	<12	<12	NA	ug/Kg
Carbon Disulfide	<6	<6	<6	<6	NA	ug/Kg
Carbon Tetrachloride	<6	<6	<6	<6	NA	ug/Kg
Chlorobenzene	<6	<6	<6	<6	NA	ug/Kg
Chloroethane	<11	<12	<12	<12	NA	ug/Kg
Chloroform	<6	<6	<6	<6	NA	ug/Kg
Chloromethane	<11	<12	<12	<12	NA	ug/Kg
Dibromochloromethane	<6	<6	<6	<6	NA	ug/Kg
1,1-Dichloroethane	<6	<6	<6	<6	NA	ug/Kg
1,2-Dichloroethane	<6	<6	<6	<6	NA	ug/Kg
1,1-Dichloroethene	<6	<6	<6	<6	35	ug/Kg
1,2-Dichloroethene (total)	<6	<6	<6	<6	700	ug/Kg
1,2-Dichloropropane	<6	<6	<6	<6	NA	ug/Kg
cis-1,3-Dichloropropene	<6	<6	<6	<6	NA	ug/Kg
trans-1,3-Dichloropropene	<6	<6	<6	<6	NA	ug/Kg
Ethylbenzene	<6	<6	<6	<6	1,000	ug/Kg
2-Hexanone	<11	<12	<12	<12	NA	ug/Kg
Methylene Chloride	<6	<6	<6	<6	25	ug/Kg
4-Methyl-2-Pentanone	<11	<12	<12	<12	NA	ug/Kg
Styrene	<6	<6	<6	<6	NA	ug/Kg
1,1,2,2-Tetrachloroethane	<6	<6	<6	<6	NA	ug/Kg
Tetrachloroethene	<6	<6	22	<6	NA	ug/Kg
Toluene	2 J	<6	2 J	<6	5,000	ug/Kg
1,1,1-Trichloroethane	4 J	<6	3 J	<6	1,000	ug/Kg
1,1,2-Trichloroethane	<6	<6	<6	<6	NA	ug/Kg
Trichloroethene	110	25	120	60	25	ug/Kg
Vinyl Acetate	<11	<12	<12	<12	NA	ug/Kg
Vinyl Chloride	<11	<12	<12	<12	10	ug/Kg
Xylene (total)	<6	<6	<6	<6	10,000	ug/Kg
1,1,2-Trichloro-1,2,2-trifluoroethane ²	9	7	-	7	NA	ug/Kg

NOTES: 1. See Figure 3 for sample locations and Appendix A for laboratory reports. See attached Supplemental Notes.

2. Tentatively identified compound (TIC). Concentration estimated.

TABLE 5 (Page 1 of 2)
Summary of Semi-Volatile Organic Analyses, Storage Pad SP-1
General Electric Company, Bloomington, Illinois

Parameter	Sample Number ¹					Units
	SP1-1-1	SP1-2-1	SP1-3-1	SP1-4-1	SP1-5-1	
Phenol	< 380	< 380	< 380	< 380	< 380	ug/Kg
bis(2-Chloroethyl)ether	< 380	< 380	< 380	< 380	< 380	ug/Kg
2-Chlorophenol	< 380	< 380	< 380	< 380	< 380	ug/Kg
1,3-Dichlorobenzene	< 380	< 380	< 380	< 380	< 380	ug/Kg
1,4-Dichlorobenzene	< 380	< 380	< 380	< 380	< 380	ug/Kg
Benzyl alcohol	< 380	< 380	< 380	< 380	< 380	ug/Kg
1,2-Dichlorobenzene	< 380	< 380	< 380	< 380	< 380	ug/Kg
2-Methylphenol	< 380	< 380	< 380	< 380	< 380	ug/Kg
bis(2-chloroisopropyl)ether	< 380	< 380	< 380	< 380	< 380	ug/Kg
4-Methylphenol	< 380	< 380	< 380	< 380	< 380	ug/Kg
N-Nitroso-Di-n-propylamine	< 380	< 380	< 380	< 380	< 380	ug/Kg
Hexachloroethane	< 380	< 380	< 380	< 380	< 380	ug/Kg
Nitrobenzene	< 380	< 380	< 380	< 380	< 380	ug/Kg
Isophorone	< 380	< 380	< 380	< 380	< 380	ug/Kg
2-Nitrophenol	< 380	< 380	< 380	< 380	< 380	ug/Kg
2,4-Dimethylphenol	< 380	< 380	< 380	< 380	< 380	ug/Kg
Benzoic acid	< 1,800	< 1,900	< 1,800	< 1,800	< 1,900	ug/Kg
bis(2-Chloroethoxy)methane	< 380	< 380	< 380	< 380	< 380	ug/Kg
2,4-Dichlorophenol	< 380	< 380	< 380	< 380	< 380	ug/Kg
1,2,4-Trichlorobenzene	< 380	< 380	< 380	< 380	< 380	ug/Kg
Naphthalene	< 380	< 380	< 380	< 380	< 380	ug/Kg
4-Chloroaniline	< 380	< 380	< 380	< 380	< 380	ug/Kg
4-Hexachlorobutadiene	< 380	< 380	< 380	< 380	< 380	ug/Kg
4-Chloro-3-methylphenol	< 380	< 380	< 380	< 380	< 380	ug/Kg
2-Methylnaphthalene	< 380	< 380	< 380	< 380	< 380	ug/Kg
Hexachlorocyclopentadiene	< 380	< 380	< 380	< 380	< 380	ug/Kg
2,4,6-Trichlorophenol	< 380	< 380	< 380	< 380	< 380	ug/Kg
2,4,5-Trichlorophenol	< 1,800	< 1,900	< 1,800	< 1,800	< 1,900	ug/Kg
2-Chloronaphthalene	< 380	< 380	< 380	< 380	< 380	ug/Kg
2-Nitroaniline	< 1,800	< 1,900	< 1,800	< 1,800	< 1,900	ug/Kg
Dimethylphthalate	< 380	< 380	< 380	< 380	< 380	ug/Kg
Acenaphthylene	< 380	< 380	< 380	< 380	< 380	ug/Kg
2,6-Dinitrotoluene	< 380	< 380	< 380	< 380	< 380	ug/Kg
3-Nitroaniline	< 1,800	< 1,900	< 1,800	< 1,800	< 1,900	ug/Kg
Acenaphthene	< 380	< 380	< 380	< 380	< 380	ug/Kg
2,4-Dinitrophenol	< 1,800	< 1,900	< 1,800	< 1,800	< 1,900	ug/Kg
4-Nitrophenol	< 1,800	< 1,900	< 1,800	< 1,800	< 1,900	ug/Kg

TABLE 5 (Page 2 of 2)
Summary of Semi-Volatile Organic Analyses, Storage Pad SP-1
General Electric Company, Bloomington, Illinois

Parameter	Sample Number ¹					Units
	SP1-1-1	SP1-2-1	SP1-3-1	SP1-4-1	SP1-5-1	
Dibenzofuran	< 380	< 380	< 380	< 380	< 380	ug/Kg
2,4-Dinitrotoluene	< 380	< 380	< 380	< 380	< 380	ug/Kg
Diethylphthalate	< 380	< 380	< 380	< 380	< 380	ug/Kg
4-Chlorophenyl-phenylether	< 380	< 380	< 380	< 380	< 380	ug/Kg
Fluorene	< 380	< 380	< 380	< 380	< 380	ug/Kg
4-Nitroaniline	< 1,800	< 1,900	< 1,800	< 1,800	< 1,900	ug/Kg
4,6-Dinitro-2-methylphenol	< 1,400	< 1,900	< 1,800	< 1,800	< 1,900	ug/Kg
N-Nitrosodiphenylamine	< 380	< 380	< 380	< 380	< 380	ug/Kg
4-Bromophenyl-phenylether	< 380	< 380	< 380	< 380	< 380	ug/Kg
Hexachlorobenzene	< 380	< 380	< 380	< 380	< 380	ug/Kg
Pentachlorophenol	< 1,400	< 1,900	< 1,800	< 1,800	< 1,900	ug/Kg
Phenanthrene	< 380	< 380	< 380	< 380	< 380	ug/Kg
Anthracene	< 380	< 380	< 380	< 380	< 380	ug/Kg
Di-n-butylphthalate	< 380	< 380	< 380	< 380	< 380	ug/Kg
Fluoranthene	250 J	< 380	< 380	< 380	< 380	ug/Kg
Pyrene	230 J	< 380	< 380	< 380	< 380	ug/Kg
Butylbenzylphthalate	< 380	< 380	< 380	< 380	< 380	ug/Kg
3,3-Dichlorobenzidine	< 750	< 770	< 750	< 760	< 770	ug/Kg
Benzo(a)anthracene	< 380	< 380	< 380	< 380	< 380	ug/Kg
Chrysene	< 380	< 380	< 380	< 380	< 380	ug/Kg
bis(2-Ethylhexyl)phthalate	260 J	270 JB	430 B	410 B	430 B	ug/Kg
Di-n-Octyl Phthalate	< 380	< 380	< 380	< 380	< 380	ug/Kg
Benzo(b)fluoranthene	< 380	< 380	< 380	< 380	< 380	ug/Kg
Benzo(k)fluoranthene	< 380	< 380	< 380	< 380	< 380	ug/Kg
Benzo(a)pyrene	< 380	< 380	< 380	< 380	< 380	ug/Kg
Indeno(1,2,3-cd)pyrene	< 380	< 380	< 380	< 380	< 380	ug/Kg
Dibenzo(a,h)anthracene	< 380	< 380	< 380	< 380	< 380	ug/Kg
Benzo(g,h,i)perylene	< 380	< 380	< 380	< 380	< 380	ug/Kg
1,13-Tetradecadiene ²	140	-	-	-	-	ug/Kg

NOTES: 1. See Figure 3 for sample locations and Appendix A for laboratory reports. See attached Supplemental Notes.

2. Tentatively identified compound (TIC). Concentration estimated.

3. Unknown compounds detected in all samples. See Appendix A.

TABLE 6
Summary of TCLP Metals, Reactivity and Corrosivity Analyses, Storage Pad SP-1
General Electric Company, Bloomington, Illinois

Parameter	Sample Number ¹										IEPA Site Objective	Units
	SP1-1-1	SP1-1-2	SP1-2-1	SP1-2-2	SP1-3-1	SP1-3-2	SP1-4-1	SP1-4-2	SP1-5-1	SP1-5-2		
Arsenic	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	NA	mg/L
Barium	1.0	0.9	1.1	1.3	0.96	0.7	0.83	0.7	1.0	1.1	5.0	mg/L
Cadmium	<0.005	0.029	0.006	0.008	0.015	0.006	0.007	<0.005	0.007	<0.005	0.05	mg/L
Chromium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	1.0	mg/L
Lead	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.1	mg/L
Mercury	<0.0002	<0.0002	<0.0002	0.0034	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	NA	mg/L
Nickel	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	2.0	mg/L
Selenium	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	NA	mg/L
Silver	<0.01	0.022	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NA	mg/L
Reactive Cyanide	0.51	<0.33	<0.30	<0.32	0.37	<0.36	0.35	<0.37	1.3	<0.32	NA	mg/L
Corrosivity	7.5	8.6	7.4	7.7	7.7	7.8	7.9	7.7	8.0	7.3	NA	pH Units

NOTES: 1. See Figure 3 for sample locations and Appendix A for laboratory reports. See Supplemental Notes.

TABLE 7
Summary of Volatile Organics Analyses, Former Incinerator
General Electric Company, Bloomington, Illinois

Parameter	Sample Number ¹						Units
	FI-1-1	FI-1-1RE*	FI-1-2	FI-2-1*	FI-2-2*	FI-2-2RE	
Acetone	8 JB	13 B	21 B	10 JB	14 B	9 JB	ug/Kg
Benzene	<6	<6	<6	<5	<6	<6	ug/Kg
Bromodichloromethane	<6	<6	<6	<5	<6	<6	ug/Kg
Bromoform	<6	<6	<6	<5	<6	<6	ug/Kg
Bromomethane	<13	<13	<13	<11	<11	<11	ug/Kg
2-Butanone	<13	<13	<13	<11	<11	<11	ug/Kg
Carbon Disulfide	<6	<6	<6	<5	<6	<6	ug/Kg
Carbon Tetrachloride	<6	<6	<6	<5	<6	<6	ug/Kg
Chlorobenzene	<6	<6	<6	<5	<6	<6	ug/Kg
Chloroethane	<13	<13	<13	<11	<11	<11	ug/Kg
Chloroform	<6	<6	<6	<5	<6	<6	ug/Kg
Chloromethane	<13	<13	<13	<11	<11	<11	ug/Kg
Dibromochloromethane	<6	<6	<6	<5	<6	<6	ug/Kg
1,1-Dichloroethene	<6	<6	<6	<5	<6	<6	ug/Kg
1,2-Dichloroethene (total)	<6	<6	<6	<5	<6	<6	ug/Kg
1,1-Dichloroethane	<6	<6	<6	<5	<6	<6	ug/Kg
1,2-Dichloroethane	<6	<6	<6	<5	<6	<6	ug/Kg
1,2-Dichloropropane	<6	<6	<6	<5	<6	<6	ug/Kg
cis-1,3-Dichloropropane	<6	<6	<6	<5	<6	<6	ug/Kg
trans-1,3-Dichloropropane	<6	<6	<6	<5	<6	<6	ug/Kg
Ethylbenzene	<6	<6	<6	<5	<6	<6	ug/Kg
2-Hexanone	<13	<13	<13	<11	<11	<11	ug/Kg
Methylene Chloride	<6	<6	<6	<5	<6	<6	ug/Kg
4-Methyl-2-Pentanone	<13	<13	<13	<11	<11	<11	ug/Kg
Styrene	<6	<6	<6	<5	<6	<6	ug/Kg
Tetrachloroethene	<6	<6	<6	<5	<6	<6	ug/Kg
1,1,2,2-Tetrachloroethane	<6	<6	<6	<5	<6	<6	ug/Kg
Toluene	<6	<6	3 J	3 J	5 J	3 J	ug/Kg
1,1,1-Trichloroethane	<6	<6	<6	<5	<6	<6	ug/Kg
1,1,2-Trichloroethane	<6	<6	<6	<5	<6	<6	ug/Kg
Trichloroethene	<6	<6	<6	<5	6	2 J	ug/Kg
Vinyl Acetate	<13	<13	<13	<11	<11	<11	ug/Kg
Vinyl Chloride	<13	<13	<13	<11	<11	<11	ug/Kg
Xylene (total)	<6	<6	<6	<5	<6	<6	ug/Kg
1,1,2-Trichloro-1,2,2-trifluoroethane ²	-	-	14	-	20	-	ug/Kg

NOTES: 1. See Figure 3 for sample locations and Appendix A for laboratory reports. See attached Supplemental Notes.

2. Tentatively identified compound (TIC). Concentration estimated.

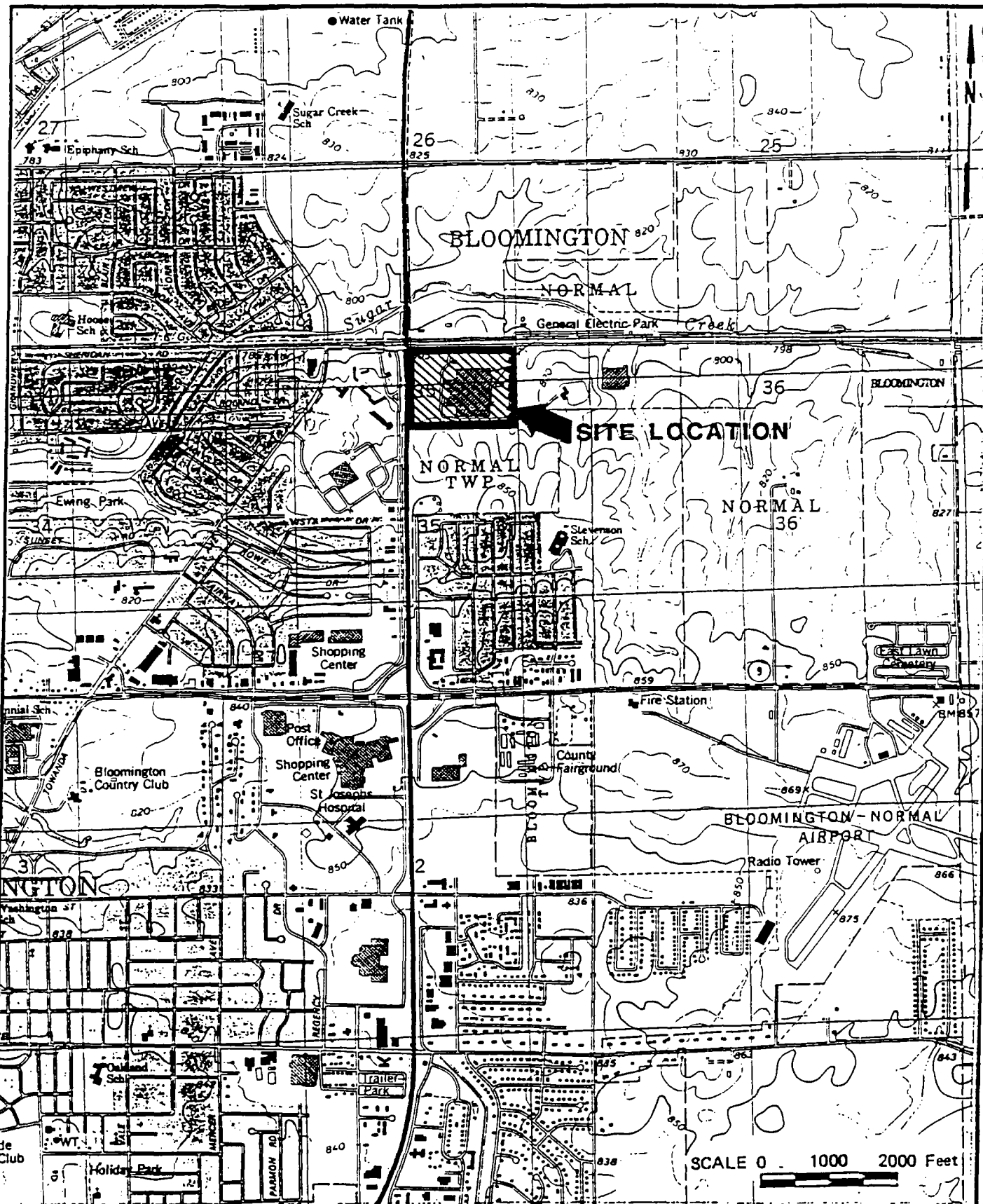
3. Sample FI-1-1 reanalyzed by laboratory (FI-1-1RE). See Appendix A.

TABLE 8
Summary of TCLP Metals, Reactivity and Corrosivity Analyses, Former Incinerator
General Electric Company, Bloomington, Illinois

Parameter	Sample Number ¹				Units
	FI-1-1	FI-1-2	FI-2-1	FI-2-2	
Arsenic	<0.0045	<0.0045	<0.0045	<0.0045	mg/L
Barium	0.93	1.2	1.3	1.1	mg/L
Cadmium	<0.005	<0.005	0.28	0.087	mg/L
Chromium	<0.01	<0.01	0.017	<0.01	mg/L
Lead	<0.002	0.0056	0.57	0.003	mg/L
Mercury	<0.0002	0.0008	<0.0002	0.0039	mg/L
Nickel	<0.04	<0.04	0.29	<0.04	mg/L
Selenium	<0.0045	<0.0045	<0.0045	<0.0045	mg/L
Silver	<0.01	<0.01	<0.01	0.04	mg/L
Reactive Cyanide	0.40	<0.33	<0.33	<0.30	mg/kg
Corrosivity	6.5	6.0	7.7	7.9	pH Units

NOTES: 1. See Figure 3 for sample locations and Appendix A for laboratory reports. See Supplemental Notes.

FIGURES

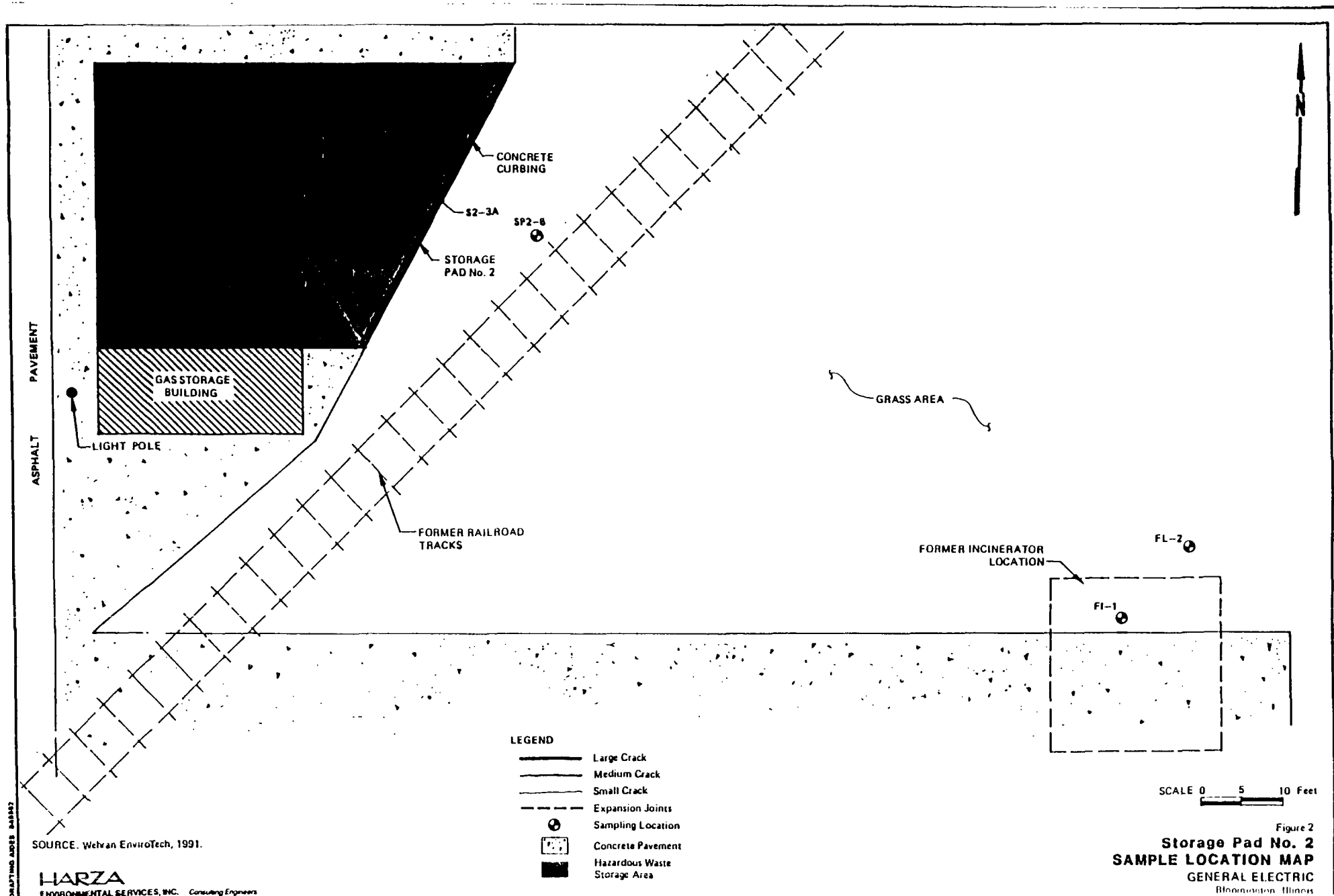


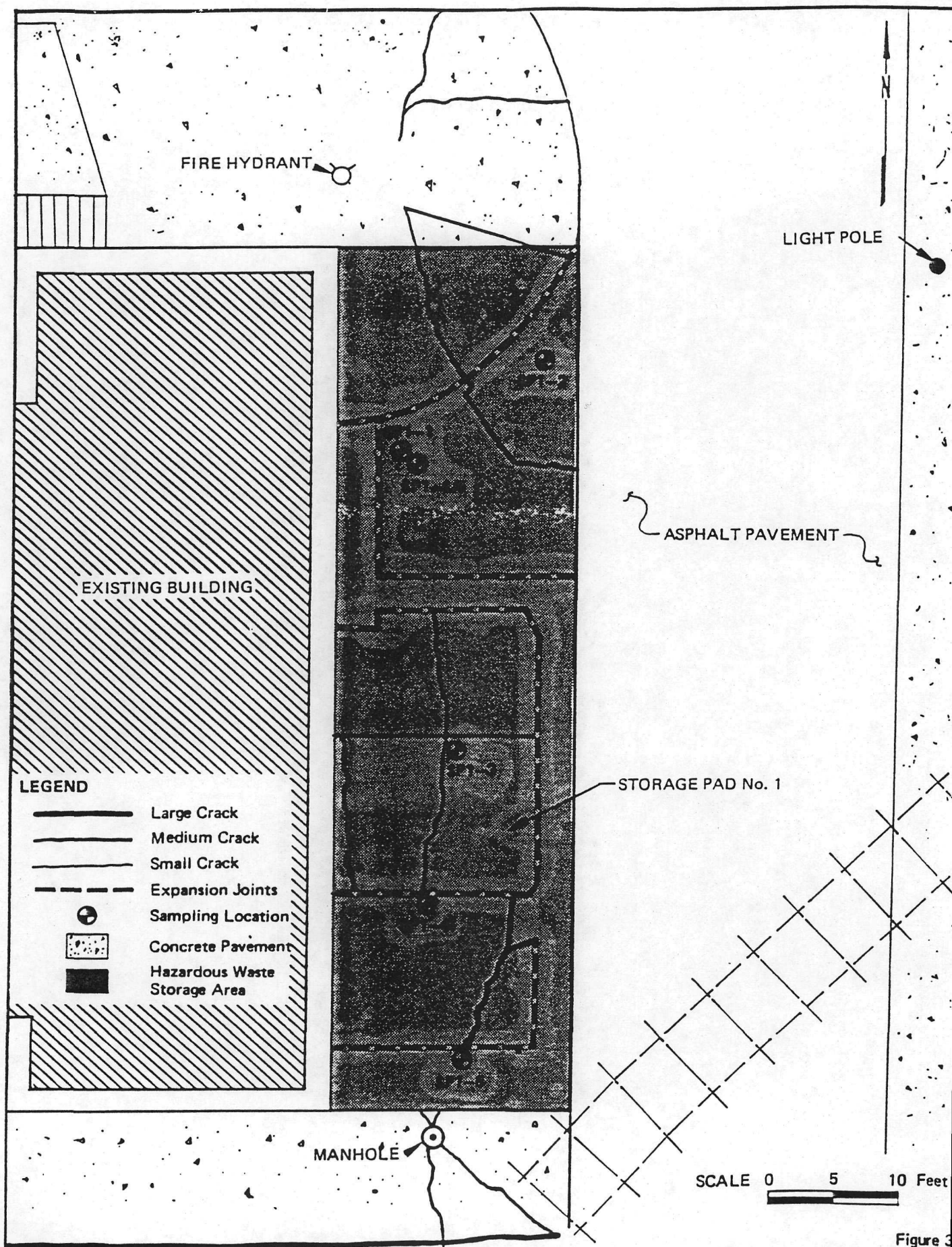
SOURCE: U.S.G.S. 1:24,000 Topographic Quadrangle Bloomington East, Illinois
Dated 1981 and Normal East, Illinois, Dated 1981.

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ENVIRONMENTAL SERVICES, INC. Consulting Engineers

Figure 1
SITE LOCATION MAP
GENERAL ELECTRIC
Bloomington, Illinois





SOURCE: Wehran EnviroTech, 1991.

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ENVIRONMENTAL SERVICES, INC. Consulting Engineers

Figure 3
Storage Pad No. 1
SAMPLE LOCATION MAP
 GENERAL ELECTRIC
 Bloomington, Illinois